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★ University of Pennsylvania

THE PROVOST'S REPORT

FOR THE YEAR ENDING

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UNIVERSITY OF PENNSYLVANIA

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ANNUAL REPORT

OF

THE PROVOST

TO THE

BOARD OF TRUSTEES

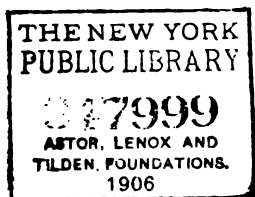
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REPORT OF THE PROVOST

To the Trustees of the University of Pennsylvania :

GENTLEMEN: Another academic year has ended, and it is my duty, as Provost of the University, to make to you the annual report of its history and work.

The Appendices are so arranged that there will always be found in Appendix I a record of the personal changes, from any cause whatsoever, in our University Body ; not only the changes which have resulted from death, or resignation, or otherwise, but also of new names which within the year have been added to the roll.

The reports of the Deans of all the Departments are included in this volume, as, also, are the statements of the work of the Hospital, of the Department of Archæology, and of the newly created Department of Physical Education.

It is my desire, in the first place, to ask your attention to the increase in the student registration in the year under review, September 1st, 1904,—August 31st, 1905, as compared with the preceding year, which ended with the 31st of August, 1904. In this latter year, our total registration was 2692. In that of which I am now writing, it rose to 2975. To this total registration, seventy-six different States and Countries contributed.

The public service which the University of Pennsylvania is prepared to render, and which, year by year, it is fitted to

render in a more earnest, sincere and self-sacrificing way, is certainly becoming known and understood and respected, far and near. The letters of inquiry which come to the University from almost every part of the world are reported to be more than double those which we received at the beginning of this new century. The interest and activity of our alumni, and the same qualities, animating our undergraduate students, keep in the minds of men and women everywhere the mission of Pennsylvania, and her name.

With the continued growth of the College—a growth which has been a constant one since we erected the Dormitories and Houston Hall—there is no reason why every Department of the University should not show an annual increase in numbers. So far, then, as that vital part of the University's work is concerned, which deals with the instruction and care of young men, we are likely to have each year larger numbers to teach, and larger numbers whose characters and life purposes we are to direct. And from the University centre of influence here in Philadelphia,—where, according to our Charter, we must always be located,—there will annually radiate in every direction, clear-headed, well-trained, pure-hearted, and truth-loving Sons of Pennsylvania.

The practical interest in our work and purposes continues, as evidenced by the gifts and bequests which were received during the year. The total sum received in cash from all sources, for all University purposes, amounts to \$834,098.17 and, while this total has once been exceeded, it has only been exceeded in that year in which we received an unusually large bequest by Will,—so that, as a matter of fair comparison, in the number of givers and in the gross amount, this

year may justly be considered as that in which the University received the greatest help and encouragement from its friends, of any year in its history. This is truly a matter for great thankfulness; for deep as our needs still are,—needs which can only be reasonably satisfied to enable us to do our work in the immediate future by the gift of many millions of dollars,—we do owe to this community, and to our alumni everywhere, the record that for the past ten years we have gone out of each year without any indebtedness, either upon Current Expense Account or upon Construction Account.

Very many urgent questions of the first importance remain yet to be considered and solved, and can only receive their solution by great gifts of money. But the good will manifested year by year may be relied upon, I feel sure, in the years that are to come; and the further growth and development of the University, the making strong the weak places and the strengthening of the strong places, will surely be made possible,—and perhaps sooner than we now see,—through that charity towards the University which has never ailed.

In the report of the Treasurer there will be found an itemized statement of each and every benefaction, so arranged that the purpose of the gift is also made evident; and while it would have given me pleasure to have referred specifically to a number of these benefactions and to the reasons which have prompted them,—I will ask your Board, instead thereof, to study the encouraging and interesting statement presented by the Treasurer.

I have already said that there will be found in Appendix I a statement of all changes and additions, both as to officers

of instruction and in the governing body. Three losses by death have taken place in the year, each one of which calls for particular mention.

On the 18th day of October, 1904, the Rev. Jesse Y. Burk, Secretary of the Corporation, died, after a long illness. As he had been a school-mate of mine at the Episcopal Academy, and a member of the same College Class—the Class of '62—for, indeed we went up to our examinations together; and as, upon the resignation of Mr. Cadwalader Biddle from his position as Secretary, Mr. Burk was elected, upon my suggestion, to fill the vacancy; his loss, though a very personal one to every member of the Board and to all who knew him, was, naturally, a peculiar loss to me. I talked with him, while still conscious, a few hours before his death. So long was his term of office, and so important his service to the University, that the Minute of the Board upon the occasion of his death is herewith transcribed, as a renewed token of our remembrance of him; and as an inspiration, likewise, to all University men, for, as the Minute records, he loved the University above all else, except his own household.

“Jesse Young Burk entered the Arts Department of the University in 1858, and was graduated in 1862. He chose as his calling the sacred ministry, and, in due time, became rector of St. Peter's Church, Clarksboro, New Jersey.

“His duties to his parish made it possible for him to accept the invitation to be the Secretary of this Corporation. He was accordingly nominated at a stated meeting held upon April 4th, 1882, and he was duly elected at the stated meeting held upon June 6th, 1882.

"With the exception of the few weeks' absence during which he underwent a severe surgical operation, he was invariably constant and faithful in his services from the day of his election until Commencement time of 1904. Every member of the Board of Trustees, during these twenty-two years, would undoubtedly bear witness to his extraordinary fitness for the post which he filled. Not only have all the Minutes of the stated meetings of the Board been kept, and the Minutes of its several Committees, with care and attention and perfection of method, but all the correspondence of the University which issued from his office, reflected credit upon and brought respect to the University and to its administration.

"He was an ideal College man,—always retaining his educated interests, and always showing the results of his culture. Although a sufferer for many years, and almost always in discomfort, his good-nature and kindness were constant, and he received with respect and attention all who came to the Offices of the University, seeking information upon the many questions connected with the several Departments.

"Next to his family and to his Church, he loved the University ; and, indeed, the hope of the last days of his life was that he might continue to live, to work for the University ; but this was not to be his lot any longer,—and he died, as he had lived, in the confidence of a good faith, and beloved of all."

Upon January 24th, 1905, our then Senior Trustee, Mr. William Sellers, died, in the University Hospital, having undergone a surgical operation, in the hopeless effort to prolong his life. I saw Mr. Sellers in his room in the Hospital, a few hours before the operation. He was under entire self-control, quiet, confident and affable, quite hopeful of recovery, and his

last words to me were a kindly expression of his regret that he would not be able to be at the Dinner which your Board courteously gave to me at about that time. Although Mr. Sellers was eighty-one years of age, neither had his mental nor physical force abated. It is true that his hair was white; but the colour of youth was upon his face, and he was erect and active as a young man. He rendered continuous service to the University during the thirty-seven years of his Trusteeship. His attendance upon Committee meetings, as well as upon Board meetings, was regular and conscientious. He was interested not only in the scientific work of the College—for he was a trained engineer of the very highest order, both in theory and practice—but all that was of interest to the University was of interest to him.

On May 19th, 1905, Mr. Francis P. Sibley, Treasurer of the University, resigned on account of ill health, and this resignation was followed soon afterwards by his death. During the term of his Treasurership, Mr. Sibley served with a fidelity which, indeed, might well be called devotion. Long after he was unable to leave his room, or, indeed, his bed, he transacted such business as he could possibly attend to,—such as the signing of cheques, from his sick-room; sending a messenger daily from his house to our office on Chestnut Street. It is not too much to say that, both with Mr. Burk, our Secretary, and with Mr. Sibley, our Treasurer, the University had become part of their life, and they were anxious to live, so that they could work for the University.

To fill vacancies in the Board of Trustees caused by death and resignation, there were elected, in the year, Dr. Wharton Sinkler and Mr. Arthur L. Church.

It would be, however, unbecoming to pass from the mention of the three University men who held office with us, without referring to the death of Mr. Oliver Hopkinson, which took place in this City on the 10th of March, 1905,—Mr. Hopkinson being in the ninety-third year of his age, and the oldest graduate of the College. His Class was, College 1832. To his family belongs the distinguished record of having taken part in the development of the University from its very beginning. In the "Alumni Register" of April, 1905, a notice of Mr. Hopkinson's life and of his University history is permanently recorded, but it may be added that Francis Hopkinson, Signer of the Declaration of Independence, and a member of the first Class to be graduated from the "College of Philadelphia" was the grandfather of Mr. Oliver Hopkinson, the record of whose death in 1905 is here made.

"University Day,"—February 22d, 1905, was observed with imposing and patriotic ceremony. In 1898, the Oration upon this day was delivered by our then President, William McKinley. In 1905, the Orator of the Day was Theodore Roosevelt; and in the roll of Honorary Degrees conferred upon that occasion, appear the names of His Majesty, Friedrich Wilhelm II, German Emperor and King of Prussia, and of Theodore Roosevelt, President of the United States. At no other Seat of Learning is Washington's Birthday so remembered as at "Pennsylvania;" and the message which is spoken upon these occasions has come to be world-wide in its influence. One hundred and twenty-two years earlier in our history, the Trustees of the same University conferred the Degree of Doctor of Laws upon the First President of the United States of America.

For your information, there is here presented the classified statement of Professors, Lecturers and Instructors; and of the Student-Body, sub-divided as to their several Departments, and, also, a table giving the geographical distribution of the latter for the year 1904-05.

PROFESSORS, LECTURERS, AND INSTRUCTORS.

	1903-04.	1904-05.
The College	128	131
Department of Philosophy	52	60
Department of Law	18	18
Department of Medicine	122	129
Department of Dentistry	46	46
Department of Veterinary Medicine	22	24
Emeritus Professors	3	3
	<hr/>	<hr/>
Duplications	391	411
	<hr/>	<hr/>
Totals	75	86
	<hr/>	<hr/>
Totals	316	325

STUDENTS.

	1903-04.	1904-05.
The College	1,258	1,490
Department of Philosophy	201	213
Department of Law	322	303
Department of Medicine	472	546
Department of Dentistry	362	359
Department of Veterinary Medicine	82	79
	<hr/>	<hr/>
Duplications	2,697	2,990
	<hr/>	<hr/>
Totals	5	15
	<hr/>	<hr/>
Totals	2,692	2,975

GEOGRAPHICAL SUMMARY OF STUDENTS.

Alabama.....	11	Italy.....	1	Peru.....	1
Arkansas.....	2	Japan.....	7	Philippine Islands....	1
Australia.....	23	Kansas.....	5	Porto Rico.....	2
Austria.....	2	Kentucky.....	20	P. E. Island.....	1
Belgium.....	1	Louisiana.....	1	Rhode Island.....	6
Brazil.....	4	Maine.....	11	Russia.....	5
Brit. West Indies. .	6	Maryland.....	39	Scotland.....	1
California.....	5	Massachusetts.....	45	South Africa.....	1
Canada.....	20	Mexico.....	3	South Carolina.....	4
Chile.....	5	Michigan.....	9	South Dakota.....	3
Colorado.....	4	Minnesota.....	4	Spain.....	1
Connecticut.....	38	Mississippi.....	1	Sweden.....	1
Costa Rica.....	2	Missouri.....	7	Switzerland.....	4
Cuba.....	5	Nebraska.....	2	Syria.....	1
Delaware.....	34	New Hampshire.....	12	Tennessee.....	1
Dist. of Columbia. .	25	New Jersey.....	200	Texas.....	8
England.....	3	New York.....	124	Utah.....	3
Florida.....	8	New Zealand.....	13	Vermont.....	6
France.....	4	Nicaragua.....	2	Virginia.....	16
Georgia.....	6	North Carolina.....	8	Washington.....	9
Germany.....	7	North Dakota.....	1	West Virginia.....	11
Holland.....	1	Ohio.....	53	Wisconsin.....	6
Honduras.....	1	Oklahoma Ter.....	1		—
Illinois.....	24	Oregon.....	2		2990
India.....	1	Panama.....	1	Duplications.....	15
Indiana.....	18	Paraguay.....	1		—
Iowa.....	9	Pennsylvania.....	2056	Total.....	2975

I have again the pleasure of calling the attention of your Board to the flourishing condition of the College. The increase in the number of students has continued and the earnestness with which they are working shows no diminution. The statistics which will be found in the report of the Librarian touching their use of the Library are instructive and gratifying. The combined influences of the improved methods of presentation, and the enlarged freedom of choice and in so far of initiation which the present arrangement of the College

**The
College**

courses puts in the power of the individual student, have resulted in a genuine college-student interest in their work.

It is now three full years since the introduction in 1902 of the new scheme of college courses. Those who were freshmen at the time of the inauguration of the present system, are now seniors, and some few have even taken their degrees already. We may fairly say that the test has been a complete one, and the experimental stage has been passed. It is for this reason, doubtless, that the Dean of the College has, in his report, again called attention to the particular features which are embodied in the scheme, and at some length has explained its nature and its workings. Radical as may seem the departure we have thus made from traditional College methods and ideas, it is really, as a little consideration will soon show, but the logical outcome of tendencies that have been at work for at least forty years. As a matter of fact, there has been no break at all; the process has been continuous, and this last stage reached the natural and normal development of all that has gone before. Towards the close of the sixties of the last century, the large development of the so-called natural sciences took place. This development not only caused, but also evidently justified the claim which their advocates were making that an adequate place should be assigned them, side by side, and on a par with the traditional College course, and as integral parts of a rational scheme of education. Simultaneously, too, with this movement, another sprang up amongst those who insisted that modern sciences and modern literatures must be added to the recognized College courses. We soon discovered that two important principles had been potent influ-

ences in bringing about these additions to the curriculum. The first was that we learned to acknowledge that all human effort for the enlargement of man's knowledge, whether of himself and his history, or of the world in which he lives, is eminently fitted to be educative of and stimulating to the individual mind; and secondly, and not less important, that just as in the world of actual life, various individuals are variously endowed, and each must contribute his share to the general advancement and find the work he is fitted to do, so in the miniature world of the College, which is but a preparation for the larger and more exacting world that is to follow, there must be recognition of individual capacities and adaptabilities, and opportunities must be offered for their discovery and initial development. This much the forces which led to the adoption of the elective system very soon made clear, Recognizing this fact of individualism, and under the impulse of a movement which was declaring itself in several of the leading Universities, in Harvard to begin with, the Faculty determined to make graduation follow, not, as heretofore, on the work of a certain number of years, but on the covering of an adequate amount of ground. This work was to be made up of a certain number of courses, to be required of all, a certain number to be chosen as a group—which might be made up of either two or three lines of work to be chosen from a carefully selected, but broadly representative list—and finally of a number of free electives—that is, of subjects that might be chosen without any restriction, other than the practical limitations imposed by the roster. The details of this will be found in the Dean's report. An exceptionally bright and rapidly working student may do this work in

three years ; the average student in four ; the student, whose rate of working (but not, necessarily, his real mental power), or whose material circumstances demand a longer time, may complete the work required for graduation in five years.

This is the scheme which was put in force in 1902, and has now gone completely through what may be called the experimental stage. The experiment has proved in every way a success. All the results that may perhaps be looked for from it have not as yet developed ; but those that have so far come into evidence have been good. One point, noted by the Dean, may perhaps also be alluded to here. The emphasis thrown by the elective system upon the personal interest in, and responsibility for, his own adequate training, that belongs to and should be felt by the student himself, would alone make it obligatory upon the College authorities to provide him with some advice and guidance in the selection that it is for him to make. To leave him to himself would be not to provoke in him rational selection, but to tempt him to drift along any current that might set his way. Now that he is at liberty to hasten his pace, as well as choose his path, there arises of necessity the temptation to hurry beyond his strength. It is, therefore, doubly necessary, and peculiarly so at the outset of his College course, that some one of experience should be there to advise and caution. Further, it will be necessary that, after he has started, there should be some experienced person to whom he may go when unforeseen difficulties begin to arise. These responsibilities of careful selection at starting, and persevering effort in the face of obstacles afterward, he must be taught and he must be helped to acquire. As the fundamental principle is now the per-

sonal rights and duties of the student, there is laid upon the College the obligation of close personal contact with him. What careful provision, and of how practical and feasible a character, is now making in the College to meet this difficult and inevitable problem, the Dean's report shows.

May we hope for one thing more? This it is out of the College's power to furnish, but it is an essential, which of late years has been conspicuously absent. I refer to a more active and enlightened interest on the part of parents in the education of their sons. School and College can do much; but they cannot do all; especially are they powerless to undo bad habits and false ideals, which through lack of adequate home supervision and advice so often have taken hard root.

It is interesting to note that Columbia University has this year adopted a very similar scheme of study in its College, and has followed it up by similar provision for the appointment of Faculty advisors. Unquestionably, the idea was in the air and it was only a question of local conditions and opportunities, when in a given Institution it should be realized. Its great merit may be said to be this, in a word; it recognizes fully that the work of a College is the education of its students,—not their graduation.

May I close by again expressing the extreme pleasure that I feel in the thought that the flourishing conditions, both as to number of students and as to earnestness of work by them performed, now visible in the College, are clear evidence that all its members, students and teachers alike, are alive to the duty which the University owes to the Commonwealth and to the Nation.

Two recent adjuncts to the College come naturally to be mentioned here: The evening classes given in Logan Hall, under the auspices of the Wharton School, under the personal direction of Dr. Meade, and the Summer School, under the Directorship of Dr. Quinn.

The Summer School was begun in the summer of 1904, and reached in that first year, in spite of the fact that but a brief time was available for spreading the news of this new venture, a total enrollment of 137. Last year (1905) the enrollment had risen to 212; of these 96 were students who had not attended the University in any other Department. In entering upon this work, the College has but fallen into line with the other leading Universities of the country. The large total enrollment that annually is found in these Schools is testimony to the fact that they meet a want that is felt by many. Teachers, whose daily work fully occupies their time during the usual months of the College session, are anxious to come again under the guidance of experts in the subjects that interest them. It is much for them, too, for a few brief weeks in the year to be brought within the range and to breathe the atmosphere of a University well equipped with laboratories, library and the necessary scientific apparatus of all kinds. If it were to do nothing else, it at least, we may be assured, will give them a higher and truer idea of the noble profession to which they belong, and a deeper sense of the value of the work to which they have devoted themselves.

The Evening School of Accounts and Finance had a total registration, in the first term of the College year, of 159, and in the second term, of 139. In the first term, 95 students took the full work of four evenings in the week; the

remainder taking special courses only. Of the students who took the full work, 83 successfully passed the final examination.

The students who attended these courses were men of mature age, many of them holding responsible positions. Coming to the work with earnestness, due to a practical conviction of its great value to themselves, and furnished, thanks to their business experience, with a good preliminary knowledge of the work, they were able to take advantage of the essential matter of the courses without delay. The handicap of exacting daily employment was largely overcome by their interest and energy. It is not surprising, therefore, to learn that a considerable amount of outside work was done in the preparing and writing out of reports and papers. It is noticeable, that, as the Director reports, the final examination was more severe than that given the undergraduate in the Wharton School in the same subjects, and yet the percentage of failure was very small.

Altogether, the first year's work has been a very gratifying success, and promises well for the popularity and the usefulness of these courses.

That our Graduate Department is established upon a firm and lasting basis is proved conclusively by the smoothness and continuity with which its work continued for the past year, under the new Dean, along the lines that had been determined by its past history. None the less is this same smoothness and continuity a sign—and a very grateful sign—of the wisdom of your Board in selecting the present Dean, Dr. C. G. Child, to take up the arduous and re-

sponsible duties of that office upon the resignation, accepted with sincere regret, of his efficient predecessor, Prof. W. R. Newbold. How the department has grown in numbers, and how its influence is gradually extending over the whole of our broad country, the statistics embodied in the Dean's report give most gratifying evidence. How alive the Department is to its duties in the way of original work the address of the Dean at the opening of the academic year shows in detail. As the facts therein embodied are not repeated in the present report, I earnestly recommend all the members of the Board to read carefully that address, which was printed in the Alumni Register.

The radical changes that were made in the previous year in the conditions and the manner of awarding, as well as in the nomenclature of, the various "Harrison Fellowships," have been in operation during the present year, and some data, at least, are furnished for estimating the wisdom of the modifications made. It is gratifying to be able to state on the basis of this experience, that the advantages then anticipated have been realized, and that the elimination of restrictions of appointments to our own graduates has made it possible to insist on a higher grade of qualification in the successful candidates, as well as in securing their appointment at an earlier date; and this is a matter of importance. The record of work done, and of work in hand, on the part of the incumbents of Fellowships for Research, as they are now called (Senior Fellowships, as they were formerly called,) I recommend to your attentive perusal.

The Department of Philosophy, as no other part of the University, has a peculiar relation to the College. The studies

pursued in it are the same as in the College and as in the College, they are followed as branches of pure, rather than of applied science. It is true that in the College they are more regarded as instruments of education, and, in the Department of Philosophy, as ends in themselves; yet, while there is here a very real difference in object which entails a certain difference of method, yet it is very easy to exaggerate the magnitude and the importance of this distinction. As a matter of fact, the two shade into one another and no hard and fast line of division can be drawn between them. Scientific work and the educative influence of such work go together and cannot practically be severed. Yet curiously enough, the proper articulation, one with the other, of the College and the Department of Philosophy, has been a problem which has encountered what have hitherto proved insuperable difficulties. These were caused not by the nature of the problem in itself, but chiefly by one fact, viz.: that by legislation of your Board the Department of Philosophy was necessarily open to students of both sexes under precisely identical conditions, whereas, with the exception of the courses in Biology, the college was open only to male students. At other Institutions this difficulty has been met by the organizations of courses of an intermediate character. These are sometimes graduate courses to which exceptionally qualified undergraduates are admitted, and sometimes undergraduate courses to which graduate students proper, who may need or want just that work, may be admitted. In view of the very unequal preparation in many subjects which is found in the graduates of different Colleges in good standing, determined by local conditions at times restricting the character and amount of progress that is possible, courses of this intermediate character become a necessity, if our graduate work

is to be of a uniformly high grade. Such courses also become necessary because duplication of work, and consequently of expense, to an unwarrantable extent, must be avoided. In the past it had been found possible to provide such courses in particular cases, but, owing to the limitations above referred to, only in a few carefully selected subjects. After discussion of the subject by a committee representative both of the College and of the Department of Philosophy, it was, on its favorable report, resolved by the Faculty of Philosophy to petition your Board to remove this restriction as to sex, in so far as bona fide students of the Department of Philosophy were concerned. In other words, to permit the admission of matriculates of that Department without distinction of sex to such courses whether primarily classified as graduate or undergraduate to which courses students of the College were admitted. This permission being given, by concurrent action of the Academic Council and of the Faculty of Philosophy, several such courses have been authorized and are now in progress. Thus, finally and happily, perfect articulation has, after many vain efforts, been secured between these closely related Departments of the University. The result, it is confidently expected, will be no less beneficial to the College than to the Department of Philosophy. It is further to be hoped that this action by bringing about organic relation between the two Departments, will do much to change the condition alluded to by the Dean in his report, that comparatively so small a number of College graduates proceed to the higher work. Many of them will thus find themselves in the midst of this advanced work almost before they are aware of it, will become interested in it and will be encouraged to persevere in it.

In my report of last year, I laid particular stress upon the importance of the Library as a working department of the University. I might repeat, with the same truth, now, what I said then. I wish even to add to it, for the actual record of use shows a steady increase this year over the last in the extent to which our students, particularly those of the College and of the Department of Philosophy, have availed themselves of the facilities it offers. It is quite safe to say that without the Library it would be utterly impossible to carry on the work of the College, not to speak of the Department of Philosophy, as it is now conducted, and as a self-respecting College of to-day must conduct its work.

**The
University
Library**

There were days,—some of you may remember them,—when it was thought possible to conduct a College efficiently without a library available for consultation by the students, as there were days when it was conceived possible to give a satisfactory course in Chemistry to students who never set foot inside a laboratory and never personally made a single experiment. But that day has gone by, for the one case as well as for the other. This fact cannot be too deeply impressed upon our minds, nor too constantly present in our thoughts.

But a library to be and to continue serviceable, needs money. It needs it badly and needs it incessantly. There are new books by leading scholars, in their various lines that must be purchased, and there are extensive and expensive publications of original documents which must be secured. There are, also, the regular and manifold issues of scientific journals which must be subscribed for, and there is the wear and tear incident to continuous use which must be made good.

All of this calls for money. Hitherto, we have been fortunate in the fact that generous friends, some of them well known members of your Board, have stepped into the breach and have personally given very considerable sums to supply some crying need of the Library, some need that unsupplied, would have seriously crippled the work of the University. We shall probably never see the day when such calls upon willing friends will cease to be necessary. But apart from such large needs, there is the steady, normal demand, which cannot be neglected or overlooked, for the purchase of the current works, constantly issuing in the various branches of science. A well-equipped teacher must get at them somehow. He cannot afford to buy them for himself, for his salary will not allow that. And there is the student who must be referred to them and must consult them. Yet even for this so necessary provision, this necessity of daily recurrence, we have been hitherto largely and almost entirely, dependent upon individual generosity. Of the periodicals in the Library, no less than 501 are gifts. Surely there should be some permanent fund from which at least the necessary current books, and the even more necessary current issues of the periodicals could be obtained, leaving us to depend upon extraordinary gifts of generously minded individuals for extraordinary needs.

Let me once more emphatically express my conviction that the question is a vital one, for it touches the life and existence of the University, especially in the College and the Department of Philosophy. Starve the Library, and we of necessity starve the College and the graduate work of the University. Will not some one arise who will face this problem for us, or help us to face it for ourselves?

The report of the Dean states the agreeable fact that the First Year Class outnumbers its predecessor, and predicts from data already gathered that the same will be true of the class to enter next year. After further noting that in this regard our own Medical School occupies a quite unique position, the Dean proceeds to give some reasons which in all likelihood account for this. The causes he finds in the greatly enlarged equipment and the facilities offered by the new Medical Building; but even more than to this it is, he thinks, due to the particular pains that are here taken to make the student's life a wholesome and happy one. And this is a statement which goes to the heart of the present student-life at "Pennsylvania." There is a reverse, however, to this picture. This is discovered when we turn our eyes upon the community at large, and, for the moment, away from our school itself. Then we become aware of two facts; first, that the profession of Medicine is becoming overcrowded, and second, that the progress of science has enormously increased the volume of knowledge that must be demanded of medical men. To meet these two conditions, i. e., to reduce the number of intending physicians and to increase the power of the average medical graduate, the thought suggested by the Dean is an advance in the entrance requirements along the lines of the sciences cognate to medicine and the addition of a fifth year to the course as it now stands. The suggestion is modified by the proposition that graduates of Colleges, who have had in College a good training in chemical, physical and biological science be admitted to the second year of the medical course. The question is a vital and a difficult one. It is vital because of the interest

the public has, in the adequate preparation of professional men. It is difficult, however, on the other hand, since the men themselves must at some age, and an early age—not an advanced one,—escape from the work of preparation and get actively at the work of application. If we keep the young physician too long in training, we may deprive him of all power of initiation; and this means to deprive him of all that makes him really valuable as a professional man. There are two sides to be looked at in all questions, and the true solution will only be found by mutual concessions. We cannot afford simply to add years to the course; because every year added is just so much subtracted from the years of a man's professional life, and that, too, from those years when the man is most vigorous, energetic, and most likely when thrown upon his own resources to gather and develop the initiative and independence that are indispensable to his success and his usefulness.

We cannot expect to turn out at graduation perfect physicians, any more than we can turn out from an Engineering School perfect engineers. In all cases, much in the way of necessary knowledge must be left for them to gain in the busy days of active practice. But as to one thing, we must take great care. We must not hold the student beyond the years when he should begin to work at his profession for himself, nor should we directly or indirectly cultivate in him the thought that he is always to be dependent upon superior guidance. A learner one must always be, but we should early be trained to find our learning for ourselves. Is not the ideal professional man he who has come by training into full possession of the powers that are in him, and has acquired in addition the necessary foundations of technical professional

knowledge? If a man has thus been trained to the full possession of his powers, he cannot but grasp more speedily and more intelligently the principles of professional knowledge, and this the more surely if there shall have been included in the elements of his training such subjects as are strictly introductory to the profession he proposes to enter. Now, the one Institution that we have whose express object is this putting a man in possession of his powers is the College, and, notwithstanding individual exceptions, in the main it must be admitted that it succeeds in accomplishing its object. This is the ground, I think, on which those who advocate a bachelor's degree as an advisable, if not a necessary antecedent of a medical course, base their opinion. It is not because of that indescribable thing called culture, but because the College graduate is likely to have a firmer grip upon himself than has his fellow. If it be remembered too, that in College courses, at least in the larger Institutions, as now constituted, there is ample provision made for very high grade instruction in chemical, physical and biological science, it becomes clear that probably a considerable percentage of their graduates are in every way, both general and special, better prepared for starting on a course of Medical studies than their fellows who are non-graduates. Every step should be taken in the direction of encouraging the entrance of men into the Medical School previously and fully prepared by general and specific College training. The proper method of approaching the solution of this difficult problem appears to me to determine when the preparatory work ends and the medical course proper begins. The line is to be drawn and the entrance requirements fixed accordingly. The Colleges will be glad and eager to take up their share in the work, for upon that score there need be no fear.

There is but little in the report of the Dean that calls for special comment. The total registration has slightly fallen off, owing to causes that were noted and discussed in the report of last year. This is, however, in a measure offset by a gratifying increase in the numbers of the First Year Class. We may hope, therefore, that the causes which produced the falling off, temporary in their nature, may have by this time had their maximum of effect, and that, consequently, more normal conditions have already set in.

The work of the School has gone on as usual. It has not, however, become mere routine work. Many advances have been made. New courses have been instituted and old ones modified. New regulations have been made as to the amount of weekly work to be required of the student with a view to assuring him, as far as may be done by regulations, the maximum of profit from his course, in view of his subsequent professional duties.

Much importance is assigned by the Dean, and no doubt rightly, to the lectures that have been delivered in the course of the year by lawyers of standing and of eminence, on various aspects of the lawyer's professional life, and on the lives and works of eminent jurists of our country. Such lectures, dealing with legal topics from an extra academical point of view, or handling subjects of legal history and achievement for which room cannot properly be found in the curriculum, cannot fail to be profitable to the student at law and will be, if continued, as there seems to be a prospect that they will be, a valuable addition to the School programme.

The Biddle Memorial Library continues its useful work. The additions to it made this year are noteworthy and will

furnish in the future valuable original material not only for the lawyer but for the student of history. The actual circulation of the books is an indication at once of the service the library is rendering and of the diligent use the students of the School are making of the advantages thus placed at their disposal.

The Dean's brief note of the publications of the Department is interesting and deserves special attention.

This Department shows an increase, small but encouraging in the numbers of its entering class. Evidently, as the Dean notes, the exceptional conditions which in the previous year caused a diminution in the number of matriculating students have worked themselves out and normal conditions have again set in. Particularly noticeable is the large percentage of students who have come from foreign parts, some very remote, to avail themselves of the facilities offered. The mere fact of the price they are willing to pay, and not merely in money, but in time and absence from friends and family connections, would have stamped these students, if we had had no other test, as a very desirable addition to our student-body; not to speak of the "gratifying index thus afforded to the reputation which our institution has achieved and is maintaining abroad."

Besides the regular academic work of the course prescribed, the Dean notes as worthy of particular interest, the activity of the three student Societies, which hold regular meetings throughout the academic year, in all of which papers of professional interest are read. Such evidence of

independent interest in the work of their profession cannot but be of incalculable value in developing in the future practitioner a scientific view of his work. And, besides, this development in our Dental students of habits of accurate observation and careful logical statement, these Societies will tend to the uplifting of the profession itself, and will lay the foundation for future investigation of scientific facts and improvements in processes and methods. Akin to these in object and results is the Penn-Dental Journal, edited and managed entirely by the students themselves, and largely subscribed for by both students and alumni. No better means could be devised than these for early impressing the Dental student with the duty imposed upon him ; a duty towards his profession and through it to the community at large, of doing all that may come in his way to do for the advancement of his specialty and of recording in accessible place any observation or experiment he may have been led to make. It is thus that investigators take their first steps, and it is in these ways that the seeds are sown of future discoveries.

The report of the Dean of this Department is like that of last year. It is a record of hard and earnest work, done under conditions that are most unfavourable and must be very depressing. The more honour, therefore, is due to those who have never abated one jot of heart or hope, but have continued labouring faithfully, in season and out of season.

There is, however, now more than a ray of light to cheer the heart and refresh the strength of the Department. An anonymous friend of the University and of the Department has given \$100,000 as an

endowment for the support of the work ; while the State of Pennsylvania has given \$100,000 for the erection of the building that has been so long and so sadly needed. The State requires, as a condition of its gift, that in the new building to be erected, laboratories shall be provided for the use of the State Live Stock Sanitary Board in its work of investigation of the diseases of domestic animals. This condition, as the Dean points out, so far from being a limitation, will really be an added advantage to the School itself,—while it will be of undoubted benefit to the State, as well. Each of the parties, State and School, will be distinctly the better off for the conditions thus attached to the appropriation.

The importance of such a School as ours to the community is sufficiently attested by the fact, noted by the Dean, that the value of livestock owned in the United States has increased since the census of 1900 was taken, by \$249,000,000. With such values at stake, it is inevitable that the public at large should come to a proper estimate of the value to them of a profession which is prepared by expert methods to safeguard their large investments, and it is also inevitable that they will come to appreciate at its proper worth, the service the University is doing in maintaining and improving, in the face of manifold difficulties, this School of Veterinary Medicine.

A question intrinsically difficult of solution has arisen as to the interrelations of the Medical and the Veterinary Departments in regard to subjects wherein the work of the two Schools “interlock,” as the Dean phrases it. Indeed, a similar question is touched on by the Dean of the Medical Department, as arising from similar conditions between his

Department and that of Dentistry. Such questions are bound to arise in a large University, which is growing and progressive. Such questions can probably never receive a solution which is good for all time. The inevitable progress of science is bound to render inefficient any arrangement which may at a given moment be arrived at. If an adjustment which promises to work well for a reasonable time in the future can be secured, it is as much as we have a right to expect, holding ourselves always in readiness to go over the question, or a similar one, again, whenever necessity may arise. Mutual goodwill and an earnest desire to serve the best interests of the whole University, on the part of the several faculties, may always be counted upon.

During the past year, the Institute lost, through resignation, the valuable services of its Director, for the past nine years, Dr. Horace Jayne. Over and above the thanks due to him for his official services as Director in supervising the equipment of the Museum, **The Wistar Institute** which at the time he entered it had as yet hardly advanced beyond its initial stage, and in the framing of plans for its future usefulness and growth, it is but proper to mention his large gifts of collections, purchased from his own funds, and of many valuable scientific books, now in the Museum Library.

On January 11th, 1905, Dr. Milton J. Greenman was elected to succeed Dr. Jayne, as Director of the Institute.

The new Director, having in view a more definite plan for carrying on the work of the Institute, and to define its re-

lations to similar Institutions, as well as to bring it into touch with them and with investigators in Anatomy generally, called a conference of ten leading American anatomists for advice and consultation. This conference met at the Institute on April 11th and 12th, and framed recommendations touching all the points raised. These recommendations may be read at length in the Director's report, and I need not repeat them here.

In accordance with the recommendations of this conference, the Institute created an Advisory Board of Anatomists. The names of those who have been chosen members of this Board will be found in the Director's report. The Director expresses the hope that with the assistance of the Board thus created, the Institute will become an important central Institute for investigators in Anatomy.

On the recommendation of the Advisory Board, Dr. Henry H. Donaldson has been appointed Professor of Neurology, and is to assume charge of his department of the Institute's work in October, 1905.

Large accessions have been made to the collections of specimens, and considerable additions to, and improvement of, the laboratory equipment.

Twelve specimens were loaned during the year for lecture purposes, and twenty-four to other laboratories, at Smith College, the University of Michigan and the University of Leipzig, for purposes of research.

Two papers have been published on the fishes in the collections in the Museum, resulting in the description of fourteen new species and two new genera, and another paper on "The Mechanics of Dislocation of the Hip Joint," is rapidly nearing completion.

It is with regret that I report to your Board the resignation, in the course of the past year, of Mrs. Sara Y. Stevenson, the President of the Board of Managers, and long the Curator of the Egyptian Section. Mrs. Stevenson's head and hand were busy in the work of the Department from its beginning, and her personality impressed itself deeply upon the organization and the conduct of the Museum.

Her efficiency as Secretary, and afterwards as President, and the generosity with which she gave her time and her labor to the service of the Department are here recorded with the thanks of the University. I also acknowledge the valuable gift which Mrs. Stevenson has since made to the Museum of her collection of scarabs, amulets and textiles. Other retirements from this special University service are individually noted, and were the occasions of peculiar regret.

Since the resignation of Mrs. Stevenson, Mr. S. F. Houston has filled the place as Acting-President. Mr. John Wanamaker has been chosen one of the Vice-Presidents to fill the vacancy caused by the lamented death of Prof. Maxwell Sommerville; Mr. Eckley B. Coxe, Jr., has been chosen a Vice-President; and vacancies on the Board have been filled by the election of Dr. Norton Downs, Mr. E. B. Smith and Mr. B. F. Pepper, the latter of whom has also been elected Secretary.

Dr. Gordon has been chosen Curator of the Section of General Ethnology, and Dr. Bates, of the Mediterranean Section.

Thanks are due to Mr. Wanamaker for important and valuable gifts to the Egyptian Section and for the replicas of Pompeïian bronzes to the Mediterranean Section. Mr. Eckley B. Coxe, Jr., has continued his generosity in subscribing, on the part of the Museum, to the Egyptian Exploration Fund and thus procuring many valuable and interesting objects resulting from the Explorations carried on under that Fund.

Much material has been gathered to enrich the American collections of the Museum, from the excursion made to Alaska by Dr. Gordon in the past summer, and as the natives of that region are fast succumbing to the influx of the new settlers, this collection promises to prove of exceedingly great value, for there is little probability that a few years hence it could be duplicated.

In the Babylonian Section the work of arranging and cataloguing the collections is going on vigorously. In the matter of publications, the Curator reports the publication of Dr. H. Ranke's monograph on "Early Babylonian Proper Names," and that four other volumes, one by Dr. Ranke, two by Prof. Hilprecht, and one by Assistant-Professor Clay, are now ready for the press, while four others are rapidly nearing completion.

In the "Transactions," papers have been published by Prof. Bates on the Etruscan Inscriptions in the Museum, by Miss H. A. Boyd and Miss E. H. Hall, on their work at Gournia, by Mr. R. B. Seager, on his excavations at Vasiliki, and by Dr. Alfred Emerson on a torso of Hermes, in the Drexel Collection of Greek and Roman statuary.

The Hospital continues its beneficent duty of caring for the sick, and has added materially during the year to its facilities for doing this, its proper work, and at the same time, has provided most thoughtfully for the comfort of its suffering inmates.

The University Hospital. Three Sun Parlors have been added to

the Wards in the Gibson Wing, so that now each Ward has one of its own. The accommodations for private patients have been increased by the addition of two new suites.

An isolation building is now completed and ready for use, should any infectious case occur in the main hospital. This will both protect the other patients and obviate the necessity, hitherto existing, of sending the infected patient to the Municipal Hospital.

Many gifts have been made, which are fully set forth in the Treasurer's report.

This is the first year in which appears the report of the Professor of Physical Education and the Director of the Department. The formal opening of the new Gymnasium took place on December 14th, 1904. The Gymnasium, and the improvement of the physical condition of Franklin Field, are the splendid gifts to the University by our Alumni. No other University interest of equal significance and importance has ever been undertaken solely by our Pennsylvania men and carried to so complete and brilliant a conclusion.

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Following the dedication of the Gymnasium your Board made certain rules, providing in the first place that the course in Physical Education be made an integral part of the University curriculum; and, later, directing as to the amount of gymnastic or athletic work which would be required in the different Departments, both in the several sub-divisions of the College and in our Professional Schools.

Dr. McKenzie's report makes so plain the distinction between athletics and physical education, and he defines the difference so clearly, that I am sure that every one who may read this reference will prefer to study the entire statement of the Director of the Department, rather than to have his views and purposes condensed in a few words. I particularly, then, ask that every one to whom this volume may come will read in full this first report from the Department of Physical Education.

That in the analysis of the first one thousand men examined, more than one-half presented marked defects of one kind or another, would not have been beforehand expected. Such a percentage would have been considered by all of us as antecedently improbable. That almost all of those showing these defects were capable of restoration to a normal condition is the highest evidence of the importance of this new work undertaken by our University. The magnitude of it will increase yearly, and its usefulness likewise, but, under good administrative methods, and the adoption, in time, of what may be called an ideal roster, this new Department will work in smoothly with the Departments of Instruction.

In addition to the reference made by the Director to the personal examination of the first one thousand students,

added interest must be taken in the Department of Physical Education, when that section of the report is studied which refers to the eye examinations conducted by Dr. William Campbell Posey, the Ophthalmologist of the Department, assisted by ten qualified physicians from the various Hospitals.

All of us know that the man who can accomplish a definite and important work in life is not only he who has the mental vigour, but the health as well; and the University has undertaken in these recent years no greater public service than the determination, in the words of the Director, "to develop an all-round citizen,—a man not only able to will and to plan, but with the vital and the physical qualities to carry out to complete execution, the plans and purposes which his mind formulates."

Much public criticism has been directed to the inter-University athletic contests occurring in the autumn of each year; but even more public interest and encouragement have been manifested in them. If moderation be

University the rule of life, we have certainly broken the
Athletics rule in athletics, and their consideration has

become a very serious matter to Universities, Colleges and Schools, as well. With the growing and healthy interest in out-door sport and recreation, and with the American love for open-air games, the question to be settled seems not to be the abolition of the game of foot-ball, and other sports,—but their restoration to a clean and manly and wholesome addition to our University student life. If victory at any cost rather than defeat with honour, is to be the stronger influence, there will be no decency in athletic teams,—as teams,—straightforward and upright as the majority of the

members of athletic teams undoubtedly are. It may be the minority which saves in politics and government, but it is the minority which has brought athletics to their present regrettable condition.

Many suggestions will undoubtedly be made to remedy an ill, which is a clearly existing evil during the autumn months of every new academic year. Those which I desire to offer may not meet with approval, but they are the result of a quiet and long contemplation of the question.

It seems to me, in the first place, that the committee which governs our inter-University athletic relations—the University Committee on Athletics—should be a very small committee,—not exceeding five in number; and, preferably, a committee of three,—with absolute power, and to be appointed by the Provost of the University. The absolute power conferred upon this committee should cover every question, including the eligibility of the student, the number of games to be played, and even a veto upon the appointment of a coach or coaches. There is no one who does not know that where a large committee has charge of such a matter as this it is difficult, if not impossible, to bring about the desired result. This is not the case with a small committee.

It seems to me, also, that no one should be allowed to represent the University in an inter-University game, except after a full year's residence, with steady maintenance of good scholastic standing.

And, if, as stated in the report of the Director of Physical Education, games should be the spontaneous expression of

the play instinct of young men, I would set an age limit,—having passed which, no student can be a candidate.

If these suggestions—or any of them—meet with favour, I shall be glad to take such action, under your direction, as may bring about a practical result.

In closing this report, all of us wish to express to the Civil Authorities of the City of Philadelphia, and to those of the State of Pennsylvania, as well, and to all our helpful friends, women and men, a thankful recognition in return for their constant sympathy with, and fostering care of, the University of Pennsylvania. It is difficult, indeed, to know just what to say, when every day brings to us some act of helpfulness to the University from within the limits of our own State. Their best return, as is our best reward, are the knowledge and hope that in every succeeding year, as in the past year, we may be the better prepared in all respects to enter upon and fulfil the present trust and the heritage so long committed to us.

I am, very respectfully,

Your obedient servant,

CHARLES C. HARRISON,

Provost.

APPENDICES.

APPENDIX I.

PERSONAL CHANGES

BY DEATH

WILLIAM SELLERS, Trustee.

JESSE YOUNG BURK, A.M., S.T.D., Secretary of the University.

BY RESIGNATION OR EXPIRATION OF TERM

FRANCIS POTTER SIBLEY, Treasurer of the University.

WILLIAM WEST FRAZIER, Trustee.

HARRY WALN HARRISON, A.B., Assistant to the Provost.

JOHN MUMFORD SWAN, M.D., Demonstrator of Osteology, and Students' Physician.

HORACE JAYNE, M.D., Ph.D., Professor of Zoölogy, and Director of the Wistar Institute of Anatomy and Biology.

ADOLPH WILLIAM MILLER, M.D., Ph.D., Assistant Professor of Materia Medica.

ROBERT FORMAD, M.D., V.M.D., Demonstrator of Normal Histology.

ARTHUR FERNANDEZ COCA, A.M., M.D., Demonstrator of Pathology.

WILLIAM MCCLELLAN, B.S., Ph.D., Instructor in Physics.

BURTON SCOTT EASTON, Ph.D., Instructor in Mathematics.

BURNETT SMITH, B.S. in Chem., Assistant in Geology and Mineralogy.

WILLIAM THOMAS LEGGO, B.S. in C.E., Instructor in Civil Engineering.

JONATHAN JONES, A.B., Assistant in English.

CHARLES FREDERIC BRÉDÉ, A.M., Assistant Instructor in French.

WALTER EDISON KRUESI, B.S. in Econ., Assistant in Economics.

WILBUR FRANCIS SMITH, Assistant Instructor in Mechanical Drawing.

ROBERT MCARDLE KEOWN, B.S., Instructor in Mechanical Drawing.

HENRY SHOEMAKER CONARD, B.S., A.M., Ph.D., Instructor in Botany.

JESSE PAWLING, JR., B.S., Assistant in Physics.

JACOB ELON CONNER, A.B., Ph.D., Instructor in Economics.

THOMAS WARNER MITCHELL, A.B., Instructor in Accounting.

CHARLES WHARTON STORK, A.M., Assistant in English.

ARCHIBALD GRAHAM THOMSON, Ph.B., M.D., Instructor in Ophthalmology.

FRANK ARDARY CRAIG, M.D., Assistant Instructor in Medicine.

CHARLES LOUIS MCKEEHAN, A.B., LL.B., Lecturer on Law.

JOEL HENRY HILDEBRAND, B.S., Assistant in Chemistry.

PAUL GERHARDT CRESSMAN, A.B., M.S., Assistant Instructor in Chemistry.

WILLARD EUGENE HOTCHKISS, Ph.B., A.M., Instructor in Political Science.

LEONARD ADOLPH PECK, B.A., Assistant in English.

ROBERT JOHN HARDING, C.E., Instructor in Civil Engineering.

THOMAS HOVENDEN, M.S., Instructor in Civil Engineering.

JULIUS G. KIRBY, B.S. in M.E., Instructor in Mechanical Engineering.

WALTER HAMLIN KNISKERN, M.E., Instructor in Mechanical Engineering.

VERNER NISBET, M.D., Assistant Demonstrator of Pharmacodynamics.

CHARLES MORTON HOSMER, M.D., Voluntary Assistant Demonstrator of Pathology.

SAMUEL MCCLARY, 3d., M.D., Assistant Demonstrator of Normal Histology.

BY PROMOTION

JAMES HARTLEY MERRICK, A.B., Secretary of the University.

FRANCIS HERMANN BOHLEN, LL.B., Professor of Law.

CRAWFORD DAWES HENING, A.B., Professor of Law.

LEO LOEB, M.D., Assistant Professor of Experimental Pathology.

OWEN LOUIS SHINN, Ph.D., Assistant Professor of Chemistry.

DAVID LINN EDSALL, A.B., M.D., Assistant Professor of Medicine.

WALTER THOMAS TAGGART, Ph.D., Assistant Professor of Chemistry.

BY ELECTION OR APPOINTMENT

WHARTON SINKLER, M.D., Trustee.

ARTHUR LATHAM CHURCH, B.S., Trustee.

CLAYTON FOTTERALL McMICHAEL, Assistant to the Provost.

CLARENCE GRIFFIN CHILD, Ph.D., Dean of the Faculty of Philosophy.

ROBERT TAIT MCKENZIE, B.A., M.D., Professor of Physical Education, and Director of the Department of Physical Education.

MILTON JAY GREENMAN, Ph.B., M.D., Director of the Wistar Institute of Anatomy and Biology.

OWEN JOSEPHUS ROBERTS, A.B., LL.B., Assistant Professor of Law.

DANIEL JOSEF MCCARTHY, M.D., Professor of Medical Jurisprudence.

HAROLD WARNER BROWN, B.S., Assistant Professor of Electrical Engineering.

JAMES PEMBERTON HUTCHINSON, M.D., Adjunct Professor of Surgery.

THOMAS GEORGE ASHTON, M.D., Adjunct Professor of Medicine.

REUBEN ARNOLD BOGIA, M.D., Assistant in Physiology.

JOHN BUSCH, M.D., Assistant Instructor in Surgery.

JEAN JACQUES ABRAM VAN KAATHOVEN, M.D., Assistant Instructor in Surgery.

I. VALENTINE LEVI, M.D., Assistant Instructor in Pediatrics.

JACK CLAXTON GITTINGS, M.D., Assistant Instructor in Pediatrics.

THOMAS STOTESBURY GITHENS, M.D., Voluntary Assistant Demonstrator of Pathology.

ALEXANDER AUGUSTUS UHLE, M.D., Assistant Instructor in Genito-Urinary Diseases.

EWING TAYLOR, A.B., M.D., Assistant in Anatomy.

WILLIAM HENRY FITZGERALD ADDISON, B.A., M.B., Demonstrator of Normal Histology.

RUFUS BELL SCARLETT, M.D., Voluntary Assistant Demonstrator of Pathology.

WILKIE NELSON COLLINS, A.B., Assistant in English.

HERMAN CLAUDE BERRY, A.B., B.S. in C.E., Instructor in Civil Engineering.

HAROLD EZRA HILTS, B.S. in C.E., Instructor in Civil Engineering.

ALBERT WILLIAM KIEFER, B.S. in C.E., Instructor in Civil Engineering.

ALBERT JOSEPH HOULE, E.M., B.S., Instructor in Civil Engineering.

RAYMOND C. SEMPLE, Assistant in Civil Engineering.

ROGER CLARK WELLS, Ph.D., Instructor in Physical Chemistry.

DUNLAP JAMISON MCADAM, A.M., Assistant in Chemistry.

WILLIAM MILTON BARR, B.S., M.A., Assistant in General Chemistry.

GEORGE EMERSON CROFOOT, B.S. in M.E., Instructor in Mechanical Engineering.

CHARLES ARTHUR FULLER, B.S. in M.E., Instructor in Mechanical Engineering.

WILLIAM JOHNSON PAYNE, A.M., B.M.E., Instructor in Mechanical Engineering.

MARTIN AUGUSTUS DOYLE, B.M.E., Instructor in Mechanical Engineering.

EARL DEAN HOWARD, Ph.M., Instructor in Banking.

JOSEPH ALBERT BECK, B.S. in Econ., Assistant in Political Science.

ENOCH MARVIN BANKS, Ph.D., Instructor in Economics.

LOUIS WILLIAM FLACCUS, Ph.D., Instructor in Philosophy.

HENRY LAMAR CROSBY, Ph.D., Instructor in Greek.

MAURICE JEFFERIS BABB, B.S., Instructor in Mathematics.

WALTER KELLER HARDT, B.S. in Econ., Assistant in Accounting.

GEORGE BENJAMIN MANGOLD, A.M., Instructor in Sociology.

JOSEPH HENRY STANNARD, Jr., Instructor in Drawing.

THOMAS CONWAY, Jr., B.S. in Econ., Assistant in Finance.

GEORGE WILLIAM KELLER, Assistant in Drawing.

LIVINGSTON CORSON, B.S., Assistant in English.

PERCY VAN DYKE SHELLY, B.S., Assistant in English.

JACOB LYNFORD BEAVER, E.E., Instructor in Electrical Engineering.

PHILIPPE DE LA ROCHELLE, B-ès-L., Assistant in French.

JOHN JAMES SULLIVAN, A.M., LL.B., Instructor in Commercial Law.

LOUIS HENRY LOSSE, B.S. in C.E., Instructor in Civil Engineering.

FRANCIS MARKOE RIVINUS, A.B., Assistant in English.

LEWIS BURTRON HESSLER, A.B., Assistant in English.

HUGER ELLIOTT, B.S., Instructor in Architecture.

ELON KANAGA, D.D.S., Demonstrator of Crown-and-Bridge Work.

NORMAN L. ROBERTS, D.D.S., Demonstrator of Operative Dentistry.

HOWARD CHILDS CARPENTER, M.D., Instructor in Pediatrics.

PENN-GASKELL SKILLERN, JR., M.D., Assistant Demonstrator of Normal Histology.

HAROLD BACON WOOD, M.D., Assistant Demonstrator of Normal Histology.

CLIFFORD BAILEY FARR, A.B., M.D., Instructor in Physical Diagnosis.

DAVID KAPP, Assistant Demonstrator of Pathology.

WILLIAM WARDER CADBURY, M.D., Assistant Demonstrator of Pathology, and of Pharmacodynamics.

RALPH S. LAVENSON, M.D., Assistant Demonstrator of Gross Morbid Anatomy.

JOHN SPEESE, M.D., Voluntary Assistant Demonstrator of Surgical Pathology.

THOMAS BEAVER HOLLOWAY, M.D., Instructor in Ophthalmology.

CHARLES ANDREW FIFE, A.B., M.D., Instructor in Pediatrics.

SAMUEL H. GILLILAND, V.M.D., M.D., Demonstrator of Veterinary Medical Diagnosis.

JOSEPH WOLSTON HUFF, A.B., Reader in History.

WINFRED TREXLER ROOT, A.B., Reader in History.

ARTHUR GUY TERRY, Ph.D., Assistant in History.

APPENDIX II.

REPORT OF THE DEAN OF THE COLLEGE FACULTY.

To the Provost of the University :

SIR : I have the honor to submit my report upon the work of the College for the year 1904-05.

CHANGES IN THE FACULTY.

The resignation of Professor Dana was received with regret. He had held the position of Professor of Art for sixteen years and his services which he very generously gave to the University were of great value to students in the courses in Architecture. The position and title vacated by the resignation of Professor Dana have been filled by the promotion of Assistant Professor Everett, who was granted leave of absence for the year 1905-06 to pursue studies in the art centres of Europe. On his return to the University the courses in Art and the History of Art will be increased in number and scope.

In recognition of valuable service rendered and ability shown in their respective subjects, Dr. Owen L. Shinn and Dr. Walter T. Taggart were promoted to be Assistant Professors of Chemistry and Dr. William McClellan to be Assistant Professor of Physics. Dr. McClellan resigned during the summer vacation to accept a position as Electrical Engineer in charge of important work.

Leave of absence for the year 1905-06 was granted

Professor McMaster, who needed freedom from University duties to enable him to complete portions of the important historical work on which he has been engaged for a number of years. Some of his courses will be given during his absence by Dr. Arthur Guy Terry, Harrison Fellow in History 1902-03, 1904-05, who has been appointed for the year Assistant in History.

Assistant Professor Bates was honored by the appointment as Annual Professor of Greek in the American School of Classical Studies at Athens for the year 1905-06, and was granted leave of absence by the University in order to enable him to accept the appointment. Dr. H. L. Crosby has been appointed Instructor in Greek during the absence of Dr. Bates.

Every large university has, each year, the problem of filling a considerable number of instructorships, owing to the fact that such instructorships are the stepping stones to advancement, both of title and salary, which frequently comes most quickly in the form of offers from other institutions. Another cause for a considerable number of changes in the teaching staff is the desire of men who have received technical or professional training to enter upon the practice of their professions after having equipped themselves more thoroughly for their work by a year or two of teaching. Superior financial inducements are often the deciding factor.

The following instructors resigned at the close of the year: J. A. Beck, Reader in History; A. C. Bogges, Reader in History; C. F. Brede, Assistant Instructor in French; J. E. Conner, Instructor in Economics; P. G. Cressman, Assistant Instructor in Chemistry; B. S. Easton, Instructor in Mathematics; R. J. Harding, Instructor in Civil Engineering; J. H. Hildebrand, Assistant in Chemistry; W. E. Hotchkiss, Instructor in Political Science; T. Hovenden, Instructor in Civil Engineering; J. Jones, Assistant in English; R. McA. Keown, Instructor in Mechanical Drawing; J. G. Kirby, Instructor in Mechanical Engineering; W. H. Kniskern, Instructor in Mechanical Engineering; W. E. Kruesi, Assistant in

Economics ; W. T. Leggo, Instructor in Civil Engineering ; William McClellan, Instructor in Physics ; T. W. Mitchell, Instructor in Accounting ; J. Pawling, Jr., Assistant in Physics ; L. Peck, Assistant in English ; B. Smith, Assistant Instructor in Geology and Mineralogy ; W. F. Smith, Assistant Instructor in Mechanical Drawing ; C. W. Stork, Assistant in English ; T. R. White, Lecturer on Business Law.

The following appointments to fill vacancies and additional positions created to meet the demands of instruction were made for the year 1905-06 : M. J. Babb, Instructor in Mathematics ; E. M. Banks, Instructor in Economics ; W. M. Barr, Assistant in Chemistry ; J. L. Beaver, Instructor in Mechanical Engineering ; Jos. A. Beck, Assistant in Political Science ; C. Berry, Instructor in Civil Engineering ; W. N. Collins, Assistant in English ; Thomas Conway, Jr., Assistant in Finance ; L. Corson, Assistant in English ; G. E. Crofoot, Instructor in Mechanical Engineering ; H. L. Crosby, Instructor in Greek (vice Dr. Bates) ; P. de La Rochelle, Assistant in French ; M. A. Doyle, Instructor in Mechanical Engineering ; Huger Elliott, Instructor in Architecture ; L. W. Flaccus, Instructor in Philosophy ; C. A. Fuller, Instructor in Mechanical Engineering ; W. K. Hardt, Assistant in Accounting ; L. B. Hessler, Assistant in English ; H. E. Hiltz, Instructor in Civil Engineering ; A. J. Houle, Instructor in Civil Engineering ; Earl D. Howard, Instructor in Banking ; J. W. Huff, Reader in History ; George Keller, Assistant in Drawing ; A. W. Kiefer, Instructor in Civil Engineering ; L. H. Losse, Instructor in Civil Engineering ; D. J. McAdam, Jr., Assistant in Chemistry ; G. B. Mangold, Instructor in Sociology ; W. J. Payne, Instructor in Mechanical Engineering ; M. Rivinus, Assistant in English ; W. T. Root, Reader in History ; R. C. Semple, Assistant in Civil Engineering ; P. V. Shelly, Assistant in English ; J. H. Stannard, Instructor in Drawing ; J. J. Sullivan, Lecturer on Business Law ; N. E. Sutphen, Instructor in Wood-working ; A. G. Terry, Assistant in History ; R. C. Wells, Instructor in Physical Chemistry.

CHAPEL ADDRESSES.

The Chapel exercises were made of especial interest by addresses during the year by the following speakers: Rev. Kerr Boyce Tupper, Rev. Trumbull Lee, John C. Bell, Esq., Judge Robert N. Willson, Dr. Wilfred T. Grenfell, Rev. Dr. W. H. Oxtoby, Rev. Howard Agnew Johnston, Rev. C. A. R. Janvier, Rev. Richard Montgomery, Rev. Charles Wadsworth, Jr.

THE ADMINISTRATION OF THE ELECTIVE SYSTEM.

The transition from the strict and personal supervision under which a student is placed in a preparatory school, especially during his last year, to the larger measure of freedom in college is the source of many problems to parents, to students, and to college administrative officers. The Freshman year, and particularly the first half of it, is a critical time in a young man's life, and it not infrequently happens that he does not realize the dangers and the responsibilities, resulting from a measure of personal liberty to which he is unaccustomed, until he has formed habits and associations which do him no good. The elective system, which, however much it may have to recommend it, requires care in its proper administration, may work harm to a student by encouraging him to avoid subjects which he regards as difficult or imagines to be distasteful. He may contract the habit of doing the thing that is easy or pleasant rather than the thing that will be of the greatest benefit to him. There has been a sacrifice of the disciplinary value of a required college course for the sake of the superior advantages to be derived from allowing a student to select from the whole list of subjects those which he wishes for any reason to take. In order that the elective system may accomplish its purpose and the freedom of college life may not prove to be too great for the good of the student, it is necessary that some wise and effective supervision be exercised over him from the time he enters college.

Every large university has been struggling with the solution of the problem how to make the college course of the greatest permanent value to the student, for, despite the undoubted benefits to be derived from participation in athletics and in the many musical, literary and social organizations to be found in every college, it is necessary to insist that these shall not infringe upon the time which must be given to study, if a degree is to represent something more than the mere fact that certain examinations have been passed. To insure the educational value of the college course and a definite and considerable amount of uniformity in the value of its degree, the College in 1902, in adopting a modification of its former elective system, required the completion by each candidate for a degree in the course in Arts and Science, Finance and Commerce and Biology* of sixty units of work of which twenty-two are definitely prescribed and consist of fundamental subjects, History, English, Mathematics, Languages, Logic and Ethics, Chemistry and Physics, and eighteen must be taken in groups consisting of six units of each of three or nine units of each of two subjects. The remaining twenty units may be elected freely by the student, who in most cases takes additional units in his group subjects. With the adoption of these regulations came also a system of advisers, each student being assigned to a member of the faculty designated for this purpose. No course of study can be entered upon without the consent of the adviser given by signing the course card filed at the Dean's office. This system has worked admirably and has been modified in some particulars as experience and the needs of students showed to be desirable. The latest modification will take effect in 1905-06, when an adviser will be assigned to every ten Freshmen in the elective courses, the need of personal supervision diminishing as the

*A unit is one hour of lecture or recitation, or two hours of laboratory work per week for one year.

The work in the technical courses in Engineering, Chemistry, and Architecture is all prescribed.

student passes successively into the Sophomore, Junior, and Senior classes. With the sympathy and interest shown by every member of the faculty in whatever concerns the happiness and welfare of the students, it is safe to say that no college students have more done for them to minimize the dangers arising from the freedom of college life and the human tendency to sacrifice future usefulness for present ease. The modifications of courses made in 1902 enabled the student of unusual ability or industry to take more work in a year, if he desired to do so, than his less able or less industrious fellow, so that sixty units credit could be earned in three years, instead of the usual four. The successive steps in the transition from the admirable old-fashioned college course to the present have been made in recognition of the truth that the system must exist for the student and not the student for the system, that the developing of the best that is in each individual by allowing, within reasonable limits, for differences of tastes, temperaments or abilities, is essential to the accomplishment of the purposes of college education.

CHANGES IN COURSES.

Important legislation which will be found in detail in the report of the Dean of Philosophy was enacted by joint action of the Department of Philosophy and the College, ratified by the Board of Trustees. The result of this is the enrichment of the work of both departments by the inclusion of a number of courses which have heretofore been given only to students in the one or the other. The College courses which under this new arrangement have been made available for graduate students are, in every case, of an advanced nature.

With the year 1905-06, the old four-year courses known as courses in Science and Technology, will disappear from the catalogue announcements, as arranged for two years ago, no new students having been admitted to them for three years. The four-year technical courses have thus entirely superseded

the five-year courses in which a larger amount of non-technical work was included. The problem of which some years ago the five-year courses were thought to be a solution is still recognized, and is the need of general studies of great cultural value to students who are looking forward to technical pursuits. Under the elective system now in force in the Arts course, it is possible for a student to complete that course and one of the four-year technical courses and earn two degrees in six years. The integrity of each degree will be in no wise impaired by compromises or concessions to the requirements for the other. The student who desires to do so can still devote five years to his course and include in it a number of subjects not required as a part of the four-year technical course.

GYMNASIUM REGULATIONS.

A great need of the University has been met by the completion of the Gymnasium, and students in the College are required to comply with the following regulation of the Board of Trustees :

“Two periods will be required lasting one hour each, of all full students, and of partial and special students as provided by a special form ; the work to be graded and made progressive throughout the four years. Exceptional cases to be excused from this requirement when approved jointly by the Director of the Department of Physical Education and the Dean of the Department.”

CHANGES IN THE ARRANGEMENT OF THE COLLEGE YEAR.

It has been the custom to devote every year two periods of two weeks each, to examinations. As the academic year, including recesses at Thanksgiving, Christmas, and Easter is barely nine months in length, this amount of time given to term examinations has seemed disproportionately large. There has been need also of a longer recess at Easter, which

it was not possible to grant without still further decreasing the number of days actually devoted to teaching. To meet the first of these problems and incidentally to make a solution of the second possible, without loss of working days in the College, the Academic Council in June last made the following changes in the arrangement of the College year :

- 1st. In subjects extending through the year, no examinations will be held and no marks given at the middle of the year (except in Wharton School).
- 2nd. For subjects completed at the end of the first term, one week will be set apart for examinations for such subjects as require it (except in Wharton School).
- 3rd. The Easter vacation will be lengthened so as to include the whole of the week beginning Easter Monday.

PUBLIC RECOGNITION OF STUDENTS WHO HAVE WON
ACADEMIC DISTINCTIONS.

It was formerly the custom to make public announcement at the Commencement exercises of the names of students who had attained distinction in their class standings or had won prizes. The necessity of shortening the time devoted to Commencement led to the omission of all matters not directly connected with the conferring of degrees, hence for several years there has been no occasion on which the University formally and publicly recognized its students who had during the year won academic distinctions. It was felt that some plan should be devised for meeting this very just claim to recognition and for this purpose the Academic Council appointed a committee to consider the question and report. As the $\Phi B K$ and ΣE Societies award memberships to students who have made notably good records in their studies, the Committee recommended, and the Academic Council approved the recommendation, that public announcement of honors and prizes be made at the annual joint meeting of these

societies in Commencement Week. This was done in June 1905 and will be annually hereafter.

THE EVENING SCHOOL OF ACCOUNTS AND FINANCE.

During the past year there have been given a number of courses of instruction in Accounting and Finance to a very serious and mature group of men, who, by reason of their daily occupations, are not able to attend the regular College classes at the usual roster hours. It was to meet what was recognized as a genuine need that the University authorized some of its instructors to arrange courses to be given in the evenings and I append, as a matter of very general interest, a report of Dr. E. S. Meade, who was appointed Director of the Evening School of Accounts and Finance.

The report of Dr. A. H. Quinn, Director of the Summer School, is also appended, as are also statistical tables, giving information concerning total registration in the College, Admission to College, Group Elections in the course in Arts and Science, Geographical Distribution of Students in the College, Comparative Standings of Students Admitted by Examination and by Certificate from Public High Schools, Students Withdrawn, Schools and Colleges from which students came, and Scholarships.

Respectfully submitted,

JOSIAH H. PENNIMAN,

Dean.

REPORT OF THE DIRECTOR OF THE EVENING SCHOOL.

To the Dean of the College:

SIR: I submit the following report of the Evening School of Accounts and Finance for the year 1904-05.

The total enrollment in the Evening School of Accounts and Finance was:

For the first term 159

For the second term 139

Of the students registered for the first term 95 pursued the regular course of four evenings per week, and the remainder pursued special courses.

Of the students enrolled for the regular course 83 successfully passed the final examination.

The students of the Evening School were, for the most part, men of mature age, many of them holding responsible positions. Nearly every industrial interest in the city was represented among the students. The work done in every course was of a high order of excellence, a fact to be explained by the maturity of the students, their habits of concentration, acquired in business life, the zeal with which they approached the work and their business experience, which has made a large amount of preliminary instruction, indispensable in the Wharton School, entirely superfluous.

In spite of the fact that the students of the Evening School are all occupied during the daytime, a considerable amount of outside work was assigned and performed, in the form of writing and the preparation of reports and papers, and the solution of problems.

The method of work pursued was that of lectures and class room discussion. Stenographic notes were taken of all the lectures. These were mimeographed and distributed to the students. It was found that the efficiency of the work was in this manner greatly increased, since the students were able to give their undivided attention to the work of the classroom and receive the results of this work in complete form in their notes. Two examinations and numerous quizzes were given during the year, the final examination being more severe than that imposed upon the students in the same subjects in the Wharton School. The percentage of failures as has been already remarked, was small. The results of the work of the first year and the fact that the enrollment during the second year has almost doubled, convince me that work of this character can be made both profitable and attractive.

The entrance requirements to the Evening School are

now equivalent to those imposed upon students for admission to the course in Business Practice and Banking in the Wharton School.

The Evening School already has enrolled a large number of high school graduates, and it is expected that this number will materially increase. Those students who are not able to present high school certificates or college diplomas are, with few exceptions, men of mature years and long business experience. The average age of students in the Evening School is 28 years.

Respectfully submitted,

E. S. MEADE,

Director.

REPORT OF THE DIRECTOR OF THE SUMMER SCHOOL.

To the Dean of the College :

SIR : I am sending to you a report of the work of the Summer School for the session of 1905. It gives me great pleasure to inform you that the total registration amounted to 212 students compared with 137 last year. Of this year's students, 149 were men and 63 were women.

The geographical distribution of students this year compared with last year is as follows :

	1905	1904
Canada	1	..
Delaware.....	5	1
Florida .....	..	1
France .....	..	1
Germany .....	..	2
Illinois.....	..	1
Kentucky	1	..
Maryland	3	..
Massachusetts	1	..
Minnesota	1	..
Missouri	1	.
Nebraska.....	1	..
New Jersey	13	7
New York.....	4	2
North Carolina.....	..	1

Ohio	3	2
Pennsylvania (outside of Philadelphia)	72	35
Philadelphia	98	80
South Carolina	1	..
South Dakota	1	..
Texas	1	1
Virginia	1	..
Washington, D. C.	3	2
Wisconsin	1	..
Utah .....	..	1
	<hr/> 212	<hr/> 137

Of this year's students, 82 had previously registered in the College, 25 had been members of the teacher's courses, one student had registered in the Department of Law and 8 in the Department of Philosophy, consequently there were 96 students in the Summer School who have not attended the University in another department.

The total number of courses subscribed for was 382. Below is a comparative statement of the courses subscribed for this year and last year.

	No. of Instructors		Courses	
	1905	1904	1905	1904
Architecture	1	2	14	20
Botany	1	2	6	6
Chemistry	4	4	41	16
English	2	3	63	48
French	1	1	29	7
German	1	1	55	24
Greek	1	1	5	10
History	2	1	21	4
Latin	1	1	29	29
Mathematics	4	4	85	49
Music	1	0	5	
Physics	1	1	19	10
Psychology	1	1	10	4
	<hr/> 21	<hr/> 22	<hr/> 382	<hr/> 227

During the school session an elaborate program of lectures, excursions and other entertainments was arranged.

These entertainments were greatly appreciated by the students. In this connection I wish to emphasize the services of Professor Hugh A. Clarke, who not only delivered a most interesting course of lectures himself, but also arranged for the organ recitals and secured the services of prominent musicians in Philadelphia to give these recitals. I wish also to lay stress upon Dr. McKinley's services in taking charge of the excursions.

I would mention here the importance of offering courses in Pedagogy and Physical Training for next year.

The success of the Summer School cannot be measured simply by the number of students in it. Its influence will increase materially the total enrollment of the University.

Respectfully submitted,

ARTHUR HOBSON QUINN,

Director.

TABLE II.

SHOWING ADMISSIONS TO COLLEGE, 1904.

Average age of students entering Freshman Class in 1902, 18 years, 10 months, 4 days.	
Average age of students entering Freshman Class in 1903, 19 years, 4 months, 7 days.	
Average age of students entering Freshman Class in 1904, 18 years, 11 months, 8 days.	
Total number of applicants.....	684
Applicants admitted on examination.....	126
Applicants admitted on public high school diploma.....	217
Applicants admitted to advanced standing.....	45
Applicants admitted to special and partial courses.....	140
	<hr/> 528
Applicants rejected on examination.....	9
Applications postponed and incomplete.....	25
Applications rejected and withdrawn.....	18
	<hr/> 52
Applicants taking preliminaries and receiving credits.....	88
Applicants taking preliminaries and receiving no credits.....	16
	<hr/> 104
Total.....	<hr/> 684

APPLICATIONS CONSIDERED BY COMMITTEE ON ADMISSION TO SPECIAL AND PARTIAL COURSES.

Applications on which the Committee took action.....	158
Total applications approved.....	140
Total applications rejected.....	15
Total applications withdrawn.....	3
	<hr/> 18
	<hr/> 158

APPLICATIONS CONSIDERED BY COMMITTEE ON ADMISSION TO ADVANCED STANDING.

Applicants who entered College.....	45
Applicants who did not enter College.....	0
	<hr/> 45

APPLICATIONS CONSIDERED BY COMMITTEE ON SCHOOLS AND ENTRANCE REQUIREMENTS.

Total number of cases acted upon.....	217
Applicants admitted on diploma without examination.....	136
Applicants admitted on diploma with examination.....	81
	<hr/> 217
Admitted from Philadelphia schools.....	104
Admitted from Pennsylvania schools.....	42
Admitted from schools in other States.....	64
Admitted on certificates from other colleges and from College Entrance Examination Board.....	7
	<hr/> 217

ADMITTED WITH CONDITIONS IN

English A.....	4	Mathematics E.....	36
English B.....	4	History A.....	5
Latin A.....	3	History B.....	7
Latin B.....	4	History C.....	4
Latin C.....	8	History D.....	6
Latin D.....	6	Greek A.....	1
Latin E.....	7	Greek B.....	1
Latin F.....	8	Greek C.....	4
Latin G.....	12	Greek D.....	5
Physics.....	17	Greek E.....	8
Mathematics A.....	23	French A.....	9
Mathematics B.....	8	French B.....	18
Mathematics C.....	17	German A.....	8
Mathematics D.....	23	German B.....	15

TABLE III.

SHOWING ELECTIONS OF GROUPS MADE BY JUNIORS AND SENIORS IN ARTS AND SCIENCE.

	1904-1905.	
	Juniors.	Seniors.
Botany-History-Zoölogy.....	1	....
Botany-Zoölogy.....	6	1
Botany-Zoölogy-Medicine.....	....	9
Chemistry-Botany-German.....	1	....
Chemistry-English.....	2	....
Chemistry-German-Mineralogy.....	....	1
Chemistry-German-Latin.....	1	....
Chemistry-Mathematics-Physics.....	....	1
Chemistry-Mineralogy.....	....	1
Chemistry-Mineralogy-Physics.....	....	1
Chemistry-Zoölogy.....	2	....

	1904-1905.	
	Juniors.	Seniors.
Economics-English-French .....	....	1
Economics-English-German .....	....	1
Economics-English-History	2	1
Economics-German .....	....	1
Economics-History .....	....	1
Economics-History-Philosophy .....	....	1
Economics-Latin-Physics .....	....	1
Economics-Political Science .....	....	1
English-French	1	....
English-French-History .....	....	2
English-French-Mathematics .....	....	1
English-German-Greek .....	....	1
English-German-History	2	2
English-German-Latin	3	1
English-Greek-History .....	....	1
English-Greek-Latin	4	1
English-History	8	8
English-History-Latin	7	2
English-History-Philosophy	2	2
English-History-Political Science .....	....	1
English-Latin	1	....
English-Latin-Philosophy	1	....
English-Philosophy	1	1
English-Philosophy-Mathematics .....	....	1
English-Physics	1	....
French-German .....	....	1
French-German-Geology	1	....
French-German-History .....	....	1
French-German-Latin .....	....	1
French-Greek-Latin	1	....
German-History	1	2
German-History-Latin .....	....	1
German-Latin	1	1
German-Mineralogy	1	....
Greek-Latin	2	2
History-Mathematics .....	....	1
History-Philosophy	1	....
History-Zoölogy .....	....	1
Latin-Mathematics .....	....	1
Mathematics-Physics .....	....	1
Physics-Zoölogy .....	....	1
Total	54	60

TABLE IV.
GEOGRAPHICAL DISTRIBUTION OF STUDENTS IN THE COLLEGE SESSION 1904-1905,
EXCLUDING STUDENTS IN COURSES FOR TEACHERS.

Middle.	South.	West.	New England.	Foreign.
Philadelphia.....623	Alabama.....7	Arkansas.....1	Connecticut.....11	Canada.....3
Pennsylvania.....296	Florida.....3	California.....2	Maine.....3	Germany.....1
Delaware.....6	Georgia.....4	Colorado.....1	Massachusetts.....6	Japan.....3
District of Columbia 11	Kentucky.....12	Illinois.....12		Mexico.....1
Maryland.....17	North Carolina.....1	Indiana.....9		Russia.....1
New Jersey.....56	Virginia.....10	Iowa.....2		South America...2
New York.....34	West Virginia.....1	Kansas.....1		
		Michigan.....4		
		Missouri.....2		
		Ohio.....20		
		Oregon.....1		
		North Dakota.....1		
		South Dakota.....1		
		Washington.....3		
1043	38	60	20	11
	Middle States.....		1043	
	Southern States.....		38	
	Western States.....		60	
	New England States.....		20	
	Foreign.....		11	
	Total.....		1172	

TABLE V.
SHOWING RELATIVE COLLEGE STANDING OF STUDENTS
IN THE COLLEGE YEAR 1904-1905, WHO WERE ADMITTED
UPON EXAMINATION *ALONE*, AND STUDENTS AD-
MITTED *WHOLLY* OR *PARTLY* UPON CERTIFICATES
FROM PUBLIC HIGH SCHOOLS.

Students Conditioned.

	Total of such Stu- dents in College.	Total who were Con- ditioned.	Number of Conditions.	Conditions per Student Con- ditioned.
Session 1904-1905.				
Regular Students by Certificates (wholly or in part)	537	321	1114	....
Regular Students by Examina- tion	340	224	1014	....
Regular Students on Advanced Standing	44	6	21	....
Specials and Partials	217	123	809	....
Total of College				
Music Students	34			
Grand Total	1172	....	....	....

TABLE VI.
STUDENTS WITHDRAWN AND DECEASED.

	Session 1904-1905.		
	Withdrawn		Deceased.
	1st Term.	2d Term.	
Seniors	1	5	1
Juniors	9	12	....
Sophomores	8	13	....
Freshmen	12	21	....
Total Regulars	30	51	1
Specials, second year .....	....	5	....
Specials, first year .....	....	3	....
Total Specials		8	....
Partials	13	29	....
Grand Total	43	88	1

TABLE VII.

SHOWING THE SOURCES FROM WHICH CAME THE STUDENTS REGISTERED IN THE COLLEGE IN 1904-1905.

Prepared by	Located at	No.
Abington Friends' School	Jenkintown, Pa.	1
Adams Academy	Quincy, Mass.	1
Alabama Polytechnic School	Auburn, Ala.	1
Allegheny College	Meadville, Pa.	2
Allegheny High School	Allegheny, Pa.	2
Altoona High School	Altoona, Pa.	3
Anniston Training School	Anniston, Ala.	1
Arequipa College	Arequipa, Peru	1
Armour Institute of Technology	Chicago, Ill.	1
Atlanta Boys' High School	Atlanta, Ga.	2
Atlantic City High School	Atlantic City, N. J.	1
		— 16
Baltimore City College	Baltimore, Md.	2
Beaver College	Beaver, Pa.	1
Bethlehem Preparatory School	Bethlehem, Pa.	3
Birdsboro High School	Birdsboro, Pa.	1
Birmingham High School	Birmingham, Ala.	2
Blair Presbyterian Academy	Blairstown, N. J.	2
Blight School	Philadelphia, Pa.	9
Bliss Electrical School	Antrim, Pa.	1
Bloomfield High School	Bloomfield, N. J.	1
Bloomsburg State Normal School	Bloomsburg, Pa.	1
Booth Preparatory School	New Haven, Conn.	1
Bordentown High School	Bordentown, N. J.	1
Bordentown Military Institute	Bordentown, N. J.	2
Bradley Institute	Peoria, Ill.	3
Bridgeport High School	Bridgeport, Conn.	1
Brown Preparatory School	Philadelphia, Pa.	17
Bulkeley School	New London, Conn.	1
Burlington High School	Burlington, N. J.	1
		— 50
Camden High School	Camden, N. J.	5
Carbon Collegiate Institute	Mauch Chunk, Pa.	1
Cartersville High School	Cartersville, Ga.	1
Cascadilla School	Ithaca, N. Y.	3
Case and Child School	Philadelphia, Pa.	1
Catholic High School	Philadelphia, Pa.	5
Cecil County High School	Elkton, Md.	1
Central High School	Philadelphia, Pa.	140
Central Manual Training School	Louisville, Ky.	2

Prepared by	Located at	No.
Central Manual Training School.....	Philadelphia, Pa.....	101
Chambersburg Academy.....	Chambersburg, Pa....	1
Cheltenham Military Academy.....	Ogontz, Pa.....	5
Cheltenham Hills School.....	Wyncote, Pa.....	3
Chester High School.....	Chester, Pa.....	14
Chestnut Hill Academy.....	Chestnut Hill, Phila..	5
Chicago Manual Training School.....	Chicago, Ill.....	1
Cincinnati Technical School.....	Cincinnati, Ohio.....	2
Classical School.....	Pasadena, Cal.....	1
Clearfield High School.....	Clearfield, Pa.....	1
Coatesville High School.....	Coatesville, Pa.....	1
Colgate University.....	Hamilton, N. Y.....	2
College of City of New York.....	New York City, N. Y.	1
College of Liberal Arts.....	Lawrence, Kansas...	1
College of St. Anne.....	d'Auray, France.....	1
Columbia High School.....	Columbia, Pa.....	4
Columbian University.....	Washington, D. C....	2
Columbus High School.....	Columbus, Ohio.....	1
Concordia College.....	Milwaukee, Wis.....	1
Conshohocken High School.....	Conshohocken, Pa....	4
Cornell University.....	Ithaca, N. Y.....	6
Corry High School.....	Corry, Pa.....	1
Cross (Mrs.) School.....	Louisville, Ky.....	1
		— 319
Danbury High School.....	Danbury, Conn.....	1
Danville High School.....	Danville, Pa.....	1
Dartmouth College.....	Hanover, N. H.....	2
DeLancey School.....	Philadelphia, Pa....	33
Delaware College.....	Newark, Del.....	1
Detroit Art Academy.....	Detroit, Mich.....	1
Detroit Central High School.....	Detroit, Mich.....	1
Dickinson Collège.....	Carlisle, Pa.....	4
Drexel Institute.....	Philadelphia, Pa....	14
DuPont Mutual Training High School...	Louisville, Ky.....	2
		— 60
Eastburn Academy.....	Philadelphia, Pa.....	3
Eastern High School.....	Washington, D. C....	3
Edward Little High School.....	Auburn, Me.....	1
Emerson Institute.....	Washington, D. C....	1
Episcopal Academy.....	Philadelphia, Pa....	37
Erasmus Hall High School.....	Brooklyn, N. Y.....	3
Erie High School.....	Erie, Pa.....	13
		— 61

Report of the Dean of the College Faculty.

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Prepared by	Located at	No.
Fargo High School.....	Fargo, N. D.....	1
Farnum Preparatory School.....	Beverly, N. J.....	2
Franklin High School.....	Franklin, Pa.....	2
Franklin and Marshall College.....	Lancaster, Pa.....	4
Friends' Academy.....	Moorestown, N. J....	1
Friends' Central School.....	Philadelphia, Pa.....	21
Friends' Select School.....	Germantown, Pa.....	10
Friends' Select School.....	Washington, D. C....	1
Fresno High School.....	Fresno, Cal.....	1
		— 43
George School	George School, Pa...	1
Germantown Academy.....	Germantown, Phila..	38
Germany Gymnasium.....	Germany	1
Gettysburg College.....	Gettysburg, Pa.....	2
Gloversville High School	Gloversville, N. Y...	1
Girard College.....	Philadelphia, Pa.....	2
Girls' High School	Philadelphia, Pa.....	17
Girls' Normal School....	Philadelphia, Pa.....	4
Grand Rapids High School.....	Grand Rapids, Mich.	1
Gresham High School.....	Gresham, Ga.....	1
Gymnasium Plois.....	Germany.....	1
		— 69
Hackensack High School.....	Hackensack, N. J....	1
Harrisburg High School.....	Harrisburg, Pa.....	4
Hartford High School.....	Hartford, Conn.....	1
Hartford Public Schools.....	Hartford, Conn.....	1
Hatboro High School.....	Hatboro, Pa.....	2
Haverford College.....	Haverford, Pa.....	16
Haverford College Grammar School....	Haverford, Pa.....	18
Higher Normal School.....	Tokio, Japan.....	1
Hill School.....	Pottstown, Pa.....	1
Holbrook's (Dr.) School.....	Ossining, N. Y.....	1
Holderness School.....	Plymouth, N. H....	1
		— 47
Illinois Western University.....	Bloomington, Ill....	1
Indianapolis Shortridge High School....	Indianapolis, Ind....	2
International Correspondence Schools ...	Scranton, Pa.....	1
		— 4
Jacob Tome Institute	Port Deposit, Md.....	2
Japan Fourth High School.....	Tokio, Japan.....	1
Johnstown High School.....	Johnstown, Pa.....	2
Joliet Township High School.....	Joliet, Ill.....	1
Juniata College.....	Huntingdon, Pa.....	1
Juniata College Preparatory School.....	Huntingdon, Pa.....	1
		— 8

Prepared by	Located at	No.
Keystone Academy.....	Factoryville, Pa.....	1
Keystone State Normal School.....	Kutztown, Pa.....	1
Kittaning Academy.....	Kittaning, Pa.....	1
Königliche Preussische Fachschule.....	Rensihreid, Germany	2
		— 5
Lafayette College.....	Easton, Pa.....	3
Lancaster High School.....	Lancaster, Pa.....	1
La Salle College.....	Philadelphia, Pa.....	4
Lawrenceville School.....	Lawrenceville, N. J....	2
Lebanon High School.....	Lebanon, Pa.....	1
Lehigh University.....	South Bethlehem, Pa.	14
Lewiston High School.....	Lewiston, Me.....	1
Lincoln University.....	Chester Co., Pa.....	1
Lockport High School.....	Lockport, N. Y.....	2
Locust Dale Academy.....	Locust Dale, Va.....	1
London Technical Institute.....	London, Eng.....	1
Louisville Girls' High School.....	Louisville, Ky.....	1
Louisville Normal School.....	Louisville, Ky.....	1
Louisville School for Boys.....	Louisville, Ky.....	1
Lower Merion High School.....	Ardmore, Pa.....	4
		— 38
McKinley Manual Training School.....	Washington, D. C....	2
Manheim High School.....	Manheim, Pa.....	1
Manor School.....	Stamford, Conn.....	1
Mansfield High School.....	Mansfield, Ohio.....	1
Manual Training School.....	Kansas City, Mo.....	1
Marston's University School.....	Baltimore, Md.....	1
Marion High School.....	Marion, Ind.....	1
Maryland Institute.....	Baltimore, Md.....	1
Massachusetts Institute of Technology...	Boston, Mass.....	3
Masten Park High School.....	Buffalo, N. Y.....	4
Mauch Chunk High School.....	Mauch Chunk, Pa....	1
Media High School.....	Media, Pa.....	5
Mercersburg Academy.....	Mercersburg, Pa.....	7
Millersville Normal School.....	Doylestown, Pa.....	1
Mishawaka High School.....	Mishawaka, Ind.....	2
Montague High School.....	Montague, Mass.....	1
Montclair High School.....	Montclair, N. J.....	1
Moravian College.....	Bethlehem, Pa.....	1
Mount Holly Academy.....	Mount Holly, N. J....	1
Mount Vernon High School.....	Mount Vernon, Ohio.	4
M Street High School.....	Washington, D. C....	1

Report of the Dean of the College Faculty.

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Prepared by	Located at	No.
National Preparatory School	Mexico City, Mex.	1
Nazareth Hall.....	Nazareth, Pa.	2
Newark High School.....	Newark, N. J.	1
New Britain High School.....	New Britain, Conn.	2
Newcastle High School	Newcastle, Pa.	2
New College	Eastbourne, England	1
New Jersey State Normal School	Trenton, N. J.	1
New York High School.....	New York City, N. Y.	1
New York State Normal College.....	New York City, N. Y.	1
New York University.....	New York City, N. Y.	1
Niagara University.....	Niagara, N. Y.	3
Norristown High School.....	Norristown, Pa.	12
Northampton High School	Florence, Mass.	1
Northeast Manual Training School.....	Philadelphia, Pa.	44
North High School.....	Columbus, Ohio.....	1
North Tonawanda High School.....	North Tonawanda, N. Y.	1
Northwestern Military Academy.....	Highland Park, Ill. ..	3
Norwich High School.....	Norwich, Conn.	1
		— 79
Ohio State University.....	Columbus, Ohio.....	1
Ontario High School.....	Ontario, Canada.....	1
Oregon Agricultural College.....	Portland, Oregon....	1
		— 3
Palatine Bridge School.....	Palatine Bridge, N. J.	1
Patterson Davenport School	Louisville, Ky.	2
Pennington Seminary.....	Pennington, N. J.	1
Pennsylvania Academy of Fine Arts.....	Philadelphia, Pa.	1
Pennsylvania College.....	Gettysburg, Pa.	1
Philadelphia Institute for the Instruction of the Blind.....	Overbrook, Pa.	2
Philadelphia College of Pharmacy.....	Philadelphia, Pa.	3
Philadelphia School for Kindergartners..	Philadelphia, Pa.	1
Phillips Exeter Academy.....	Exeter, N. H.	7
Phoenixville High School.....	Phoenixville, Pa.	3
Pine Grove High School.....	Pine Grove, Pa.	1
Pittsburg Academy.....	Pittsburg, Pa.	3
Pittsburg Central High School.....	Pittsburg, Pa.	5
Portsmouth High School.....	Portsmouth, N. H. ..	1
Pottsville High School.....	Pottsville, Pa.	2
Pratt Institute.....	Brooklyn, N. Y.	1
Princeton University.....	Princeton, N. J.	4
Purdue University.....	Lafayette, Ind.	3
Paraguay Institute.....	Paraguay, S. America	2
Pekin High School.....	Pekin, Ill.	1
		— 54

Prepared by	Located at	No.
Radnor High School.....	Radnor, Pa.....	4
Randolph Macon Academy.....	Danville, Va.....	1
Rayen High School.....	Youngstown, Ohio...	1
Reading Boys' High School.....	Reading, Pa.....	8
Real-Gymnasium	Russia.....	1
Ridge School.....	Washington, Conn...	1
Rochester East High School.....	Rochester, N. Y.....	1
Rugby Lower School.....	Rugby, England.....	1
		— 18
St. Charles High School	St. Charles, Minn....	1
St. Caryl's College.....	Chicago, Ill.....	1
St. George's School.....	Newport, R. I.....	1
St. Joseph's College.....	Philadelphia, Pa.....	6
St. Luke's School.....	Wayne, Pa.....	1
St. Mark's School	Southboro, Mass....	1
St. Paul's School.....	Concord, N. H.....	3
Salisbury High School.....	Salisbury, Md.....	1
Scranton High School.....	Scranton, Pa.....	1
School of the Lackawanna.....	Scranton, Pa.....	1
Schools in Ireland.....	Ireland.....	1
Seattle High School	Seattle, Wash.....	1
Sewickley High School.....	Sewickley, Pa.....	1
Shady Side Academy.....	Pittsburg, Pa.....	3
Shamokin High School.....	Shamokin, Pa.....	3
Sheffield Scientific School.....	New Haven, Conn...	1
Sioux Falls High School.....	Sioux Falls, S. D....	1
South Manchester High School.....	South Manchester, Conn.....	1
Spokane High School.....	Spokane, Wash.....	1
Springfield High School.....	Springfield, Ohio....	1
State College.....	State College, Pa....	1
Stiles Preparatory School.....	Philadelphia, Pa.....	1
Swarthmore College.....	Swarthmore, Pa.....	1
Syracuse High School and University....	Syracuse, N. Y.....	1
		— 35
Tacoma High School.....	Tacoma, Wash.....	1
Technical Institute.....	Friedberg, Germany.	1
Temple College	Philadelphia, Pa.....	4
Thiel College.....	Greenville, Pa.....	1
Tokio University.....	Tokio, Japan.....	1
Toledo High School.....	Toledo, Ohio.....	3
Trenton High School...	Trenton, N. J.....	3
Trinity School.....	Trinity, N. Y.....	1
Troy High School.....	Troy, N. Y.....	1
		— 16

Report of the Dean of the College Faculty.

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Prepared by	Located at	No.
University of Illinois.....	Chicago, Ill.	1
University of Notre Dame.....	Notre Dame, Ind....	3
University of Pennsylvania.....	Philadelphia, Pa....	6
University of Rochester.....	Rochester, N. Y....	1
University Military School.....	Mobile, Ala.	3
University Preparatory School.....	Ithaca, N. Y.	2
University School for Boys.....	Baltimore, Md.	1
Ursinus Academy.....	Collegeville, Pa....	1
Ursinus College.....	Collegeville, Pa....	2
Ursinus Preparatory School.....	Collegeville, Pa....	1
		— 21
Villa Nova College.....	Villa Nova, Pa....	2
Virginia Mechanical Institute.....	Blacksburg, Va....	1
		— 3
Walden High School.....	Ellenville, N. Y....	1
Walnut Hills High School.....	Cincinnati, Ohio....	1
Warren High School.....	Warren, Pa.	2
Washington and Jefferson College.....	Washington, Pa....	1
Washington High School.....	Washington, D. C...	1
Wesley College.....	Winnepeg, Manitoba, Canada.....	1
Wesleyan University.....	Middletown, Conn...	2
West Chester High School.....	West Chester, Pa....	12
West Chester Normal School.....	West Chester, Pa....	4
West Des Moines High School.....	Des Moines, Iowa...	1
Western University of Penn'a.....	Pittsburg, Pa.	1
West Jersey Academy.....	Bridgeton, N. J....	2
Westtown Boarding School.....	Westtown, Pa....	2
Wilkes-Barre High School.....	Wilkes-Barre, Pa....	3
William Penn Charter School.....	Philadelphia, Pa....	104
Williamsport High School.....	Williamsport, Pa....	1
Wilkesburg High School.....	Wilkesburg, Pa....	1
Williston Seminary.....	Easthampton, Mass..	1
Wilmington High School.....	Wilmington, Del....	2
Wilmington Military Academy.....	Wilmington, Del....	1
Wilson's Preparatory School.....	New York City, N. Y.	1
Winthrop School.....	Philadelphia.....	5
Wittenberg Academy.....	Springfield, Ohio....	1
Woman's College.....	Baltimore, Md.	1
Woodberry Forest School.....	Orange, Va.	2
Woodbridge School.....	Woodbridge, N. Y...	1
Woodward High School.....	Cincinnati, Ohio....	1
Woolsey School.....	Pittsburg, Pa....	1

Prepared by	Located at	No.
Worcester Academy.....	Worcester, Mass.....	2
Worcester High School.....	Worcester, Mass.....	1
Wyoming Seminary.....	Kingston, Pa.....	1
		— 161
Yale University.....	New Haven, Conn...	1
Yeates School.....	Lancaster, Pa.....	2
York Collegiate Institute.....	York, Pa.....	4
York County Academy.....	York, Pa.....	1
York High School.....	York, Pa.....	5
		— 13
Privately prepared.....		32
		—
Total.....		1172

SUMMARY.

	Number of Institutions.	Number of Students.
Colleges and Universities.....	55	116
High and Other Public Schools :		
Pennsylvania	50	462
New York	9	15
New Jersey	11	17
Delaware	1	2
Maryland	2	2
Ohio	3	3
Western States.....	23	29
New England States.....	14	15
Southern States	12	19
	— 125	— 564
Private Preparatory Schools :		
Pennsylvania	36	345
New York	6	9
New Jersey	8	13
Delaware	1	1
Maryland	3	5
Ohio	1	1
Western States.....	2	4
New England States.....	11	20
Southern States	9	13
	— 77	— 411
Foreign Schools, Institutions, etc.....	13	14
American Technical Schools and Institutes.....	18	35
	288	1140
Privately Prepared.....		32
Total.....		1172

University of Pennsylvania.

TABLE VIII. SCHOLARSHIPS.

	Arts.	Finance and Commerce.	Science.	Mechanical Engineering.	Civil Engineering.	Chemistry.	Biology.	Architecture.	Chemical Engineering.	Music.	Grand Total.
<i>Full Faculty Scholarships.</i>											
Post Senior.....								1			1
Seniors	9		1	2	1	1	1	1	1		17
Juniors.....	10			5	5	4	2		2		28
Sophomores	4			4	6	1		2	3		20
Freshmen	11			10	9			2	1		33
Partials.....								1			1
Total											100
<i>Partial Faculty Scholarships</i>											
Senior.....				1				1			2
Junior	1										1
Sophomore					1						1
Freshman					1						1
Total											5
<i>Muhr Scholarship.</i>											
Senior.....	1										1
Freshman					1		1				2
Total											3
<i>Penn Scholarship.</i>											
Partial.....					1						1
Total											1
<i>Free City Scholarships.</i>											
Seniors	2	1		1			2				6
Juniors	1	1		3	1						6
Sophomores.....	2			3	4		1	1	2		13
Freshmen.....				2	2			1	1	1	7
Second-year special.....								2	3		5
Partials.....					1						1
Total											38
<i>Pay City Scholarships.</i>											
Seniors	1			3	2	1	7				14
Juniors	3			2	1						6
Sophomores.....				2	5	1	1		1		10
Freshmen.....	2			3	1	2	1	1			10
First-year special.....											
Total											40
Totals	47	2	1	41	42	10	16	13	13	2	187

APPENDIX III.

REPORT OF THE DEAN OF THE FACULTY OF PHILOSOPHY.

To The Provost of The University ;

SIR : I have the honor of submitting herewith a report upon the work of the Department of Philosophy during the academic year 1904-1905.

COMMITTEES.

The following members of the Faculty served during the year upon the Executive Committee :

Edgar F. Smith, Vice-Provost, *ex officio*,
Felix E. Schelling,
Amos P. Brown,
Charles L. Doolittle,
Edwin G. Conklin,
John C. Rolfe,
C. G. Child, Dean, *ex officio*.

THE FACULTY.

For promotions of members of the Faculty and Lecturers, I beg to refer to the report of the Dean of the College.

The following appointments were authorized by the Executive Committee :

Arthur C. Howland, Ph. D., Assistant Professor of Medieval History.

Roland G. Kent, A. M., Ph. D., Lecturer in Greek.

Mr. E. S. Corwin, Harrison Fellow in American History, was authorized to take the work of Assistant Professor Ames during his illness.

Dr. C. J. Mendelsohn, Harrison Fellow for Research in Classical Languages, and Dr. J. F. Willard, Harrison Fellow for Research in European History, were authorized to give instruction in accordance with the terms of their Fellowships. Dr. L. I. Neikirk, Harrison Fellow for Research in Mathematics, was authorized to give not only graduate instruction but also, by virtue of a precedent recently initiated, a certain amount of undergraduate instruction, the total number of hours in both Departments not to exceed the stated number permitted by the regulations.

At the opening meeting of the Department for the present year, held September 30, 1905, the record of the Department in scientific investigation for the past year was briefly reviewed. This review appeared, by courtesy of the Editor, in the *Alumni Register*, Vol. X. pp. 51-63. Reference is made to it here as dealing with the year covered by this Report. It affords gratifying evidence of the continued activity of the members of the Department, both Faculty and students, in the field of productive scholarship.

FELLOWSHIPS AND SCHOLARSHIPS.

Herman Ranke, Ph. D., Harrison Fellow for Research in Assyriology, completed during the year a volume of inscriptions to be known as "Tablets Dated in the Reign of the Rulers of the First Dynasty of Babylon." The volume will include copies of the tablets, an index of the names which appear in them, and an introduction in which is given a translation of a number of tablets in illustration of their character. Among other important results he has determined that Shamshi-Adad, an Assyrian king familiar from the early record but whose date had not been fixed, was a contemporary of Hammurabi. This work and the volume on "Early Babylonian Names"

published during the summer of 1904, of which Professor Newbold gave an account in his Report for the year 1903-1904 are the chief results of Dr. Ranke's incumbency of the Fellowship. He resigned it on December 31, 1904, to become Assistant Curator of the Egyptian Section of the Museum, but continued to give instruction in Assyrian and Egyptian until his resignation of this Curatorship to become Assistant Curator of the Egyptian Section of the Royal Museum at Berlin.

On January 1, 1905, Dr. Ranke was succeeded in the Harrison Fellowship for Research in Assyriology, under special terms of appointment, by Mr. Arno Poebel, a student for nine semesters in Indo-Germanic and Semitic languages in the Universities of Heidelberg, Marburg, Jena, and Zürich. Mr. Poebel has been engaged since his appointment in a study of the literature connected with the special work he is to pursue in connection with the tablets in the possession of the University, in transcribing and translating neo-Babylonian tablets dated in the reign of King Nabunaid, and in working on older Babylonian tablets, dated for the most part in the period of the first dynasty of Babylon and written, with one exception, in Sumerian.

James Field Willard, Ph. D., Harrison Fellow for Research in European History, was engaged throughout the year in investigating the subject of direct taxation during the period of the beginnings of Parliament, or, more precisely, from the reign of Edward I to and including the reign of Edward III. During the vacation of 1904, Dr. Willard pursued his investigations in England, and, by your permission, remained abroad until December examining the manuscript records of taxes in the Public Record Office and conducting research work in the British Museum. Dr. Willard's study is designed to cover the history of direct taxes of a national character, that is those laid immediately upon land or other property in the possession of all individuals and classes at one time, and not upon classes except when each and every member of a class was taxed. This, it will be seen, excludes customs and taxes upon a part

of the people or upon part of a class. Dr. Willard is also paying especial attention to the limits of the control of Parliament upon such taxes. After his return Dr. Willard continued his investigation, making use of the printed material available in this country.

Charles Jastrow Mendelsohn, Ph. D., Harrison Fellow for Research in Classical Languages, continued during the year the investigation into Plautus's use of word-play which he began in his doctoral dissertation. In his dissertation he considered word-plays on proper names. In his present study he has examined the use of words in double meanings. His memoir is practically ready for publication. It consists, primarily, of a collection of the occurrences of such word-plays and, secondly, of their classification into various divisions and subdivisions. In this classification that of Wartle is used in his "*Das Wortspiel bei Shakspeare*," with modifications, however, when they seemed advisable. Instances of words used in a double meaning are divided, by this classification, into two broad classes. Class I includes those cases in which the double meaning exists in the words of the speaker and does not require a remark of another character in the play to bring it out. Class II comprises those instances in which the double meaning is brought out by the dialogue, — i. e. more than one person takes part in the word-play. These two broad divisions are then sub-divided in as nearly similar a manner as was possible. The memoir will also include, as in the dissertation on the "*Name-Play*," a consideration of Plautus's preference for characters of one kind over others in allotting his word-plays. Statistics here, as in the case of the name-play, prove clearly that Plautus's favorite mouth-piece for a word-play is a slave, and that he hesitates to put a word-play into the mouth of a woman character, no matter what her station in life.

Roy Dykes Hall, Ph. D., Harrison Fellow for Research in Chemistry, continued, during the past year his study of the derivatives of columbium. The rich supply of material at his

command enabled him to solve certain unsettled points in regard to this element, namely :

1. He has shown that the element neptunium, announced in 1876 by Hermann, does not exist.

2. He has demonstrated that the reaction of titanium with hydrogen-peroxide, regarded as trustworthy for the detection of titanium in the presence of columbium, cannot be relied upon, because columbium itself—or something which it contains—gives a color upon the addition of hydrogen-peroxide very like that imparted to titanium salts by the same reagent.

3. He has shown that peroxyfluocolumbates may be easily prepared, and that they are yellow-colored objects, and not colorless, as had been observed by certain Italian chemists.

4. He has made a careful study of a long series of organic bases upon columbium derivatives, and obtained results which have since led to studies in entirely new directions with columbium. The outcome of these will be awaited with interest.

Lewis Irving Neikirk, Ph. D., Harrison Fellow for Research in Mathematics, continued during the year his researches in the Theory of Groups. The results of six months of work with regard to groups of order p^6 were anticipated by the publication in France by Potiou of a work on this subject. Dr Neikirk then began the determination of all types of abstract groups of order p whose generational operations correspond to the partition $(m-r, r)$. This is not yet completed. A memoir based upon his thesis, upon "Groups of order p^{m-1} ," part of which appeared in the *Transactions of the American Mathematical Society*, July, 1905, will shortly be published in full in the *Publications* of the University.

Everett Franklin Phillips, Ph. D., Fellow for Research in Zoology, continued his investigation of variation and correlation in the honey-bee (*Apis mellifera*, L.). This investi-

gation was begun in co operation with Dr. D. B. Casteel during the summer of 1903, and a brief statement of results was published in the *Biological Bulletin*, Vol. VI. pp. 18-37. As many new questions had been suggested, the work was again taken up during the summer of 1904, and was continued throughout the following year. The results are now practically ready for publication. The questions considered were: (1) Influence of the size of the cells on variation; (2) Comparative variability of sexes as influenced by parthenogenesis; (3) Variation in color; (4) Correlations in different planes of symmetry; (5) Correlation of adjacent veins; (6) Significance of correlation; (7) Abnormalities of venation. The standard methods of statistical work were used in all cases and the results expressed in mathematical terms. Dr. Phillips also acted during the year as Assistant to Professor Conklin in his course in Histology and Embryology. He was reappointed for 1905-1906, but resigned toward the close of the year to accept the responsible position of Expert in Agriculture in the Bureau of Agriculture at Washington.

Frank Julian Warne, Ph. D., University Fellow for Research in Economics, was engaged during the year upon a volume entitled "The Coal Mine Workers," a study of labor organization and a companion volume to his study on immigration, "The Slav Invasion and the Mine Workers," already published. The present volume has just been issued [1905] by Messrs. Longmans, Greene, and Company. During the year, Dr. Warne published the following articles:

"Some Industrial Effects of Slav Immigration," *Charities*, December 3, 1904.

"Railway Distribution of Immigrants," *Railway World*, December 10, 1904.

"The Miners' Union: Its Business Management," *Annals of the American Academy of Political and Social Science*, January, 1905.

"Labor Conditions in the Anthracite Region" (three articles), *Public Ledger* (Philadelphia), August 10, 11, 12, 1905.

John Louis Haney, Ph. D., University Fellow for Research in English, made during the year extensive additions to his stores of material for a new edition of his "Bibliography of Coleridge," in pursuit of which he has conducted correspondence with collectors and students of Coleridge in this country and abroad. The results of a study of the literary history of the University of Oxford were presented in a lecture entitled "The Literary Associations of Oxford University," delivered at the Central High School, April 7, 1905, and elsewhere. Dr. Haney also began a variorum edition of Coleridge's "Christabel," which he will continue so soon as he obtains access to certain rare editions which he has not been able to find in this country.

Isaac Husik, Ph. D., University Fellow for Research in Philosophy, continued his studies in the logic of Aristotle. In this connection he has written a paper, which awaits publication, entitled "Aristotle on the Law of Contradiction," in which he argues for an empirical interpretation of the Law of Contradiction, and discusses the meaning of a passage in the Posterior Analytics of Aristotle which Waitz and other writers on the subject (which the exception of Maier) misunderstood. In addition, Dr. Husik undertook, at the suggestion of Professor Newbold, a study of the history of Medieval Philosophy, with the object of sometime giving a course in the subject, which is one neglected in American institutions. It may also be mentioned that Dr. Husik's thesis on Messer Leon's Commentary, re-written and somewhat enlarged since presentation for the Doctorate in 1903, is printing with Brill in Leyden, and will appear about December. The section of the work dealing with the sources of Messer Leon's commentary, particularly the portion treating Messer Leon's indebtedness to Walter Burleigh, has been entirely re-written on the basis of an examination of Burleigh's "Super Veterem Expositio," a copy of which was loaned Dr. Husik by the kindness of Yale University.

Three University Fellowships for Research without stipend were created by the Board of Trustees and awarded to

candidates in Economics, English and Philosophy. The reports of the candidates appear in substance above.

A special University Fellowship in History for 1904-1905 in the sum of \$225.00 endowed by private and anonymous gift, was awarded by the Board of Trustees to Miss Elizabeth Girdler Evans of Dayton, Ohio.

In his report for the year 1903-1904, Professor Newbold, Dean of this Department, referred to the modifications of the regulations governing the award of Fellowships and Scholarships on the George Leib Harrison Foundation which were submitted to the Board of Trustees on November 3, 1903, and then approved. The Harrison "Senior" Fellowships had, until the modifications went into effect, been restricted to candidates holding the Doctorate of this University, and the Harrison Scholarships to its baccalaureates. These restrictions were removed. Further, the Harrison Fellowships, fourteen in number, created in 1896, which had been permanently assigned to given subjects, were made Fellowships at Large, assignable to any subject, similar to the five Fellowships at Large created in 1897. The purpose of these modifications, as Professor Newbold notes, was to make the competition on which awards are based more free, both by enabling a larger number of candidates to apply and by removing a limitation as a result of which, in the case of a majority of Fellowships, the merits of candidates were compared only with the merits of other candidates in a particular subject.

These modifications have been justified by their results. The responsibility of the Executive Committee in making its recommendations of candidates and its difficulty in performing its task promptly and equitably have been both increased and diminished, but in both cases in ways productive of good. They have been increased because of the increase in the number of candidates and the necessity of comparing the merits of candidates in different subjects. This leads to a still closer scrutiny of candidates and may lead to a demand for

fuller and more explicit evidence in regard to their claims. In the light of the statement which is in preparation of the scholarly records of holders of Fellowships and Scholarships in the past, there can be no doubt of their high average quality. Increased scope of selection, however, and the increased pressure upon the several Departments to encourage the application of candidates able to emerge successfully from this more severe competition conduces directly to a still higher average. On the other hand the task of the Committee has been lightened because of the increased promptness with which awards may be made. If Departments have a prescriptive right to Fellowships, recommendations of candidates to the Committee may be deferred or delayed at pleasure, even to a point where the Committee may have to take a less deliberate and formal action than is consistent with their duty of controlling the decisions of the Group Committees. It need hardly be added, also, that promptness in making awards exacts promptness from applying candidates and is due in justice to candidates who have filed their applications at the date set by the regulations. Finally also the removal of the restriction rendering graduates of this University alone eligible, one incidental to the experimental stage of the history of the Foundation, tends to bring the system of awards more truly into accord with the generous spirit that animated its endowment.

In brief, I express the unanimous opinion of the Executive Committee that, in the light of present experience at least, the value of the modifications in question has been amply demonstrated.

STUDENTS.

Degrees were conferred upon forty-one students, fifteen receiving the degree of M. A., twenty-six that of Ph. D. A table showing the number of degrees, conferred in the past years will be found appended to this Report, and also a list of the candidates who received degrees, their present occupa-

tion, and the titles of the theses submitted by those who attained the doctorate. Attention may properly be directed to the number of graduates who received appointments to responsible academic positions.

Absence on leave has hitherto been granted only to those students who had completed an acceptable number of courses for the Doctorate or who were pursuing their work temporarily at another university. On November 4, 1904, it was enacted by the Executive Committee that leave of absence for a term or part of a term should be granted to a student submitting adequate reasons for his proposed absence and affirming his intention to resume work the following term. This action was approved by the Faculty at its stated meeting. The reasons submitted were convenience of record, retention of a hold upon students, to ensure their completion of their work, and partial correction of the statement of registration in the catalogue, which, though not representing the total for the year, is incorrectly quoted as representing it. No misrepresentation is involved; if students are prevented from returning their names are dropped in the Fasciculus and the number more than offset by additional matriculations at the mid-year. Of nine this year, two failed to return, a number substantially offset by fourteen matriculations at mid-year.

At its stated yearly meeting, the Faculty, acting in an advisory capacity, submitted to the Board of Trustees a resolution for the regulation of fees paid by students in other departments taking work in this Department, to the effect that such students, while paying full fees in their own Departments shall be allowed to take four courses (not yearly, but during their attendance) to be credited towards degrees without payment of tuition. This resolution was intended primarily to restrict the number of credited courses taken by undergraduates needing but few units to attain their baccalaureate degrees, but was framed to include students in the professional schools as well. In the latter relation it is not designed to encourage professional students in general to

pursue two courses simultaneously towards two degrees. This is wholly within the control of the Deans of the several Departments, as a student must obtain permission of his Dean to pursue work in another Department. It is designed only to encourage the exceptional student, who will unhesitatingly be given such permission, to profit to the full by the opportunities which the University affords, and to continue his relation with it as a student after taking his professional degree. By this arrangement a candidate for the Master's degree will have eight hours, and a candidate for the Doctorate will have twenty hours, to complete after leaving the professional school, if he take advantage only of the credits allowed him free.

The resolution in question was approved and enacted by the Board of Trustees at its meeting in October, 1905.

INSTRUCTION.

At its meeting in March, the Board of Trustees approved by resolution the creation of a group of courses open to the combined attendance of graduates and undergraduates for credit toward degrees in their respective Departments. The recommendation of this action by the Faculty at a special meeting held January 16, 1905, followed upon its approval by the Academic Council of the College and by the Executive Committee after its consideration by a joint conference of representative committees.

The courses in question form a group intermediate in character between those exclusively undergraduate and those exclusively graduate. They may include courses primarily undergraduate but of a grade which enables them to be credited as graduate courses, and courses primarily graduate, which qualified undergraduates may pursue to advantage.

The more important considerations which led to the creation of this group are as follows :

1. Duplication of courses in certain subjects is obviated. The proposed system permits simplification of the roster,

tends to conserve the energy of the teaching force, and renders possible its more effective distribution—is in brief, highly advantageous economically.

2. The arrangement of suitable courses for individual students is facilitated.

3. Progression from the B. A. to the M. A. degree is rendered more direct and logical.

4. Courses of this character had already been specially licensed in Biology and Psychology, and exceptionally authorized in special cases by the Executive Committee.

5. The admission of courses to this special status can be readily safeguarded.

6. The system has long been in use at other institutions, for example at Harvard, Yale, Columbia, Cornell, and Johns Hopkins.

In making its recommendation to the Board of Trustees, the Faculty of Philosophy called special attention to the fact that, as the courses in this Department are open to women as well as to men, the admission of women students to these courses was implied in the resolution. Their admission was, however, justified, as the non-coeducational character of the college would in no way be affected (Yale and Columbia may be cited in illustration), the courses would be of advanced character only, attended by a comparatively limited number of students, and our own experience of such courses, where exceptionally permitted, has confirmed that of other institutions where they exist, that, as regards this particular, no reason for objection offers itself.

The number of courses thrown open to the combined attendance of undergraduates and graduates will probably for some years remain relatively small, but in time some such systematic use of them will be made as is made elsewhere. It is certainly desirable that, where a subject permits it, an unbroken gradation should exist between courses primarily undergraduate and those primarily graduate: the line between the two has been too sharply drawn.

STATISTICS.

The statistical tables appended below call for brief comment. The facts concerning the registration for the year may be summarized as follows. The number of auditors, 16, was the same as for the previous year, and the number of students absent on leave, 19, was also the same. The number of regular students in residence, exclusive of Fellows for Research, namely 202 as against 179, shows an increase of 12.8%. The total number registered, 227 as against 207, shows an increase of 9.6%. The percentage of women students in regular standing was 15.1% as against 16.4% the previous year, and the total number of women students 19.8% as against 19.8% the previous year.

I. REGISTRATION.

NEW STUDENTS.

	Research Fellows.	Students holding a Baccalaureate Degree.	Auditors.	Total.
1904-05.....	1	87	13	101
1903-04.....	7	84	12	97
1902-03.....	2	78	10	90
1901-02.....	1	86	4	91
1900-01.....	1	55	8	64

OLD STUDENTS.

1904-05.....	8	115	3	99
1903-04.....	11	95	4	110
1902-03.....	9	99	6	114
1901-02.....	8	78	14	100
1900-01.....	8	87	17	112

TOTALS.

1904-05.....	9	202	16	227
1903-04.....	12	179	16	207
1902-03.....	11	177	16	204
1901-02.....	9	164	18	191
1900-01.....	9	142	25	176

The following table shows the number of women in the Department for the last ten academic years :

	1895-96	1896-97	1897-98	1898-99	1899-00	1900-01	1901-02	1902-03	1903-04	1904-05
Fellows and other students holding a degree.	13	13	18	21	32	27	31	37	34	36
Auditors.....	17	14	18	11	12	9	4	6	7	9
	—	—	—	—	—	—	—	—	—	—
	30	27	36	32	44	36	35	43	41	45
Percentage of regular women students by years as above :	12	12	14	16	23	18	18	20.9	19	15.1
Percentage of total number of women to total number of students :	18	15	22.5	20	25	20	18.5	21	19.8	19.8
Percentage of Women Auditors to total number of Auditors :	28	17.5	30	46	33	36	22	37.5	43.1	56.3

II. INSTITUTIONS REPRESENTED.

	A. B.	B. S.	Other Bacca- laureate Degrees.	Master's Degrees.	Ph. D.	Theo- logical Degrees.
Allegheny College	2					
Brown	2		1			
Bryn Athyn	1					
Bucknell	4		1	2		
Calvin College.....	1					
Carlton		1				
Central University of Ken- tucky	1					
Chicago	1					
Colgate	1			1		
College of City of New York	2					
Colorado		1		1		
Columbia	3			1		
Columbian University...	1	1		1		
Cornell	2	1 in Math.				
Crozer Theological Semi- nary						1
Dartmouth			1	1		
Dickinson	8			1		
Drury	1					
Earlham			2			
Elmira College	1					
Franklin and Marshall ..	1		1			

II.—INSTITUTIONS REPRESENTED.—*Continued.*

	A. B.	B. S.	Other Bacca- laureate Degrees.	Master's Degrees.	Ph. D.	Theo- logical Degrees.
General Theological Seminary						I
Harvard	3			3	I	
Haverford	4	2		2		
Heidelberg	1			1		
Illinois	1					
Indiana	3			2		
Johns Hopkins	2				I	
Juniata	1					
Karls Gymnasium	Grad.					
Lafayette	2		2			
Lebanon Valley	1	I				
Lehigh		I				
Lycée de Montbeliard	Grad.					
Marietta	1					
Michigan			I			
Moscow Imperial School	Grad.					
Muhlenberg	1					
Nashville	1	I		I		
Nebraska		I			I	
New York University	1		I	I		
Northwestern		2	I	2		
Oberlin	3			I		2
Pennsylvania	21	46	2	20	9	
Pennsylvania College	1					
Plon Gymnasium	Grad.					
Princeton	5			2		
Protestant Episcopal Seminary						I
Radcliffe	1					
Reale Gymnasium, Switzerland	Grad.					
Rutgers		2		I		
		I in Agri.				
St. Andrew's, Scotland	Grad.					
Swarthmore	6		4	3		
Temple College	7					
Texas		I		I		
Tokyo University	Grad.					
Toronto	1					
Ursinus	5					
Vassar	3					
Virginia	1			I		
Washington College	1			I		
Washington and Lee	1					
Washington State Uni- versity	1					
Washington University				I		
Wellesley	4					

II.—INSTITUTIONS REPRESENTED.—*Continued.*

	A. B.	B. S.	Other Bacca- laureate Degrees.	Master's Degrees.	Ph. D.	Theo- logical Degrees.
Wells	I					
Wesleyan		I				
Wilson	I					
Wisconsin		I	3	3		
Woman's College of Baltimore	I					
Yale	3			I		

Total number of degrees.....	277
Graduates of Foreign Institutions.....	7
	<hr/> 284
Repeated	73
	<hr/> 211
Auditors	16
	<hr/> 227

III. ELECTIONS OF REGULAR STUDENTS.

	1895-96		1896-97		1897-98		1898-99		1899-00		1900-01		1901-02		1902-03		1903-04		1904-05	
	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.
Assyrian.....	4	5	4	6	8	6	1	3	2	4	3	7	5	3	3	3	4	4	1	3
Hebrew.....	2	2	3	3	2	1	2	2	5	4	5	4	2	1	7	5	6	3	7	7
Arabic and Syriac.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sanskrit.....	1	2	2	2	3	4	1	5	5	2	4	3	2	2	2	2	2	2	2	2
Greek.....	2	2	2	2	3	4	4	2	2	2	4	3	2	2	4	4	4	4	10	18
Latin.....	1	2	2	2	1	4	1	5	5	2	4	3	2	2	6	10	10	15	10	16
Germanics.....	2	2	2	2	3	1	5	4	8	3	8	12	14	19	11	8	8	15	10	10
Romanics.....	2	2	2	4	1	6	5	9	8	2	9	10	8	13	5	6	6	15	10	7
English Literature.....	5	7	4	10	7	11	12	5	14	3	17	15	3	22	19	22	15	31	18	18
English Philology.....	1	7	6	6	8	7	4	14	5	8	7	13	14	13	19	22	12	18	10	12
Philosophy.....	14	29	9	26	8	15	4	4	4	4	7	8	3	12	19	22	12	18	10	12
Ethics.....	3	8	4	9	3	5	3	4	4	4	3	4	5	4	18	10	18	6	20	3
Psychology.....	7	8	2	10	3	8	8	9	9	3	7	5	12	5	16	6	13	10	21	11
Pedagogy.....	11	15	11	7	4	6	6	6	8	2	5	13	5	12	3	4	10	9	11	12
American History.....	8	6	4	11	6	6	9	9	7	7	5	5	5	6	13	4	10	9	11	12
American Constitutional History.....	1	2	2	3	1	3	1	1	1	1	.....	.....	.....	.....	2	.....	1	.....	2	2
European History.....	5	12	6	16	4	13	6	14	8	4	6	10	8	7	10	8	9	4	8	7
Economics and Statistics.....	4	28	6	16	5	12	7	8	5	8	9	12	6	10	4	11	14	5	18	13
Political Science.....	6	9	4	7	2	4	1	4	2	5	5	5	5	6	4	10	4	7	13	13
Sociology.....	.....	.....	.....	.....	.....	.....	3	4	3	5	4	5	5	7	7	4	5	4	4	9
Mathematics.....	4	2	4	2	3	8	4	7	6	8	9	10	6	5	8	7	7	4	4	11
Astronomy.....	1	1	4	4	2	3	2	1	2	2	6	4	1	3	1	3	1	4	2	6
Physics.....	6	1	3	3	2	6	4	3	2	2	4	7	4	5	5	9	9	11	15	15
Chemistry.....	12	2	13	18	19	12	18	15	15	22	12	20	28	22	35	19	25	15	15	15
Geology.....	10	11	11	10	10	7	5	1	1	3	2	4	1	2	2	1	6	3	3	8
Mineralogy.....	1	7	1	7	1	7	5	5	3	3	1	4	1	5	2	4	2	3	4	5
Botany.....	1	2	2	1	1	4	3	5	3	5	3	8	9	7	4	6	3	3	5	5
Zoology.....	3	4	3	3	6	5	7	2	3	5	3	5	7	4	6	3	2	3	3	1
Anthropology.....	.....	.....	.....	8	.....	8	.....	70	.....	94	.....	68	.....	.....	.....	.....	.....	.....	.....	.....
Minors not yet elected.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Totals.....	98	194	91	182	94	188	120	240	122	244	142	284	164	328	173	346	177	354	215	381

IV. DEGREES CONFERRED SINCE OPENING OF DEPARTMENT.

Year	PH.D.			M.A.			M.S.			Total
	Men	Women	Total	Men	Women	Total	Men	Women	Total	
1889	1	.....	1	.....	.....	.....	.....	.....	.....	1
1890	1	.....	1	.....	.....	.....	.....	.....	.....	1
1891	7	.....	7	1	.....	1	.....	.....	.....	8
1892	4	1	5	.....	.....	.....	.....	.....	.....	5
1893	13	.....	13	2	2	4	.....	.....	.....	13
1894	9	3	12	3	2	5	.....	.....	.....	17
1895	14	2	16	1	1	2	1	.....	1	19
1896	16	2	18	6	4	10	1	.....	1	29
1897	21	3	24	2	.....	2	.....	.....	.....	26
1898	21	3	24	1	2	3	2	.....	2	29
1899	17	3	20	4	.....	4	1	.....	1	25
1900	14	1	15	8	3	11	1	.....	.....	26
1901	19	6	25	.....	3	3	.....	.....	.....	28
1902	13	1	14	6	2	8	.....	.....	.....	22
1903	27	2	29	9	3	12	.....	.....	1	42
1904	15	3	18	5	5	10	1	.....	1	29
1905	24	2	26	11	4	15	.....	.....	.....	41

Attention may be directed to the percentage of graduates of other institutions enrolled in the Department, which remains notably large, namely 70.5%. This, however, may lead to the inquiry whether our own graduates are properly represented. What relation the number of our graduates bears to the total number undertaking graduate work here and elsewhere it is difficult to ascertain precisely, but it seems clear that practically all who undertake graduate work elsewhere do so in conjunction with theological courses, or because they hold academic positions or are on leave of absence; the number is in any case inconsiderable. But is the number

who do undertake work what it should be? On examining the registration of the graduate schools of seven leading institutions, the percentage of their own graduates taking graduate work, excluding those who take a second baccalaureate degree in addition to that of a minor institution, proves to be respectively 14, 19.7, 19.8, 33.5, 46.5, 50, 52.1 %, as against 29.5 % with us. That the percentages of four institutions exceed ours may not be so significant as it might seem. It may be due to the fact that the University offers no course in Divinity (the students in which would pursue courses in this Department in conjunction with their theological work), to different regulations as regards leave of absence or study *in absentia*, or to other reasons. Without attempting to analyze these in the percentages, which would be difficult or perhaps impossible, it may however be asked whether the members of the Faculty do all they might to urge the claims of graduate study upon capable students. Special effort on the part of one Department last year certainly produced marked results. No undue pressure should, of course, be brought to bear upon a student in advising him in regard to the choice of a career. But, in the case of students intending to teach, the desirability of graduate preparation, either at once upon graduating or in a year or two, not only may with propriety, but should necessarily, be urged in opposition to his natural eagerness to "get to work" or his wholly indefensible later disposition to be satisfied with his equipment and position, either of which may render his career less efficient than it might otherwise have been. Other students, moreover, who evince special capacity, may, quite irrespective of their taking a degree or becoming teachers or even productive scholars, be encouraged to pursue the subjects for which they display special fitness. There is no reason why a graduate school should be exclusively a finishing school for teachers.

I trust that, in conclusion, it may not be unfitting for me to express my indebtedness to Professor Newbold for his

unfailing kindness and courtesy in giving me of his counsel. His successor has, indeed, to thank him for more than this. In the administration of no student body do so many and varied individual problems present themselves as in a graduate school; in other Departments of a university the students are largely legislated for in the mass—here the individual problem is of paramount importance. This variety and complexity in the individual problems dealt with, while aiding in the perception of guiding principles, may readily exert an influence, if the apparent exigency of special cases be allowed undue weight, to break down or prejudicially to modify by exceptional precedents the laws and regulations which are the expression of those principles. In continuing the labors of their predecessors, Professor Newbold and the Executive Committees serving with him have made many and most important contributions to the definition of the principles and the formulation of the regulations now in force in the Department—practically completing the responsible task of furnishing it with an administrative and educational system—and, further, have maintained them unwaveringly in their original integrity. This invaluable service, and this tradition as invaluable, may well receive express acknowledgment from their successors, who profit by them. I may also refer to the example set by Professor Newbold in respect to matters of record, completeness and accuracy in which depend in this Department to a very large degree upon the personal oversight of the executive officer. I sincerely desire to emulate, even though I may not equal, Professor Newbold's solicitude and scrupulous care in this regard.

The increase in the growth of the Department—more markedly noticeable in recent years—is due to its prudent governance in the past and the spirit which has animated its teaching force. The wise judgment which has characterized its administration, the continued maintenance of its strict rules controlling admission and of the stringency of its requirements for degrees, constant effort upon the part of the members of

its Faculty to uphold and to elevate its standards of scholarship in teaching and in private research—these ideal elements, together with the example afforded by its graduates and its exceptionally generous system of Fellowships and Scholarships, have been the effective factors. The conservation of these ideal elements alone will ensure permanence to our steady growth, our increased opportunities for usefulness.

Respectfully submitted,

CLARENCE G. CHILD,
Dean.

V. HIGHER DEGREES GRANTED, COMMENCEMENT DAY, 1905.

MASTER OF ARTS.

William Radcliffe Anson, A. B. (Ursinus, 1903): Germanics and French.

Resumes graduate work.

Harold Charles Barker, B. S. (Pennsylvania, 1903): Physics. Instructor in Physics and resumes graduate work.

Arthur Cleveland, A. B. (Pennsylvania, 1904): English and Latin.

Resumes graduate work.

Frank Levis Cloud, A. B. (Pennsylvania, 1904): Greek, Latin and Sanskrit.

Resumes graduate work.

Minnie Gertrude Eckels, Ph. B. (Bucknell, 1901): English and Germanics.

Shippensburg, Pa.

Ferdinand Harry Graser, B. S. (Pennsylvania, 1903): Economics.

Resumes graduate work.

Samuel B Heckman, Ph. B., A. B. (Earlham, 1893: Harvard, 1894): Germanics, Romanics, Pedagogy.

Absent on leave, 1905-1906.

1260 N. Park Ave.

Wesley Lynn Hemphill, A. B. (Pennsylvania, 1904): Classics, English.

Student, Princeton Theological Seminary, Princeton, N. J.,

Clinton Nevius Laird, A. B. (Pennsylvania, 1903): Chemistry, Mineralogy.

Teacher in Canton Christian College, Honglok, Canton, China.

Grace Edith MacLean, A. B. (Temple College, 1903): Romanics, English, Germanics.

Resumes graduate work.

Lillian Pace, B. S., M. A. (Columbian University, 1897, 1898):
Physics, Mathematics.

Instructor in Mathematics, Central High School, Washington, D. C.

Leonard Adolph Peck, B. A. (Yale, 1900): English, Germanics.

Instructor in English, Episcopal Academy and resumes graduate work.

Henry Baruch Sachs, B. S. (Pennsylvania, 1900): Germanics.
Absent on leave 1905-1906.

921 North 6th Street.

Ruth Elma White, A. B. (Dickinson, 1904): English, Germanics.

Teacher of English, Trenton High School, Trenton, N. J.

Winton John White, A. B. (Pennsylvania, 1904): Pedagogy, Classics.

Resumes graduate work.

DOCTOR OF PHILOSOPHY.

Clarence William Balke, A. B. (Oberlin, 1902): Chemistry.

Thesis: *Double Fluorides of Tantalum.*

Harrison Fellow for Research in Chemistry.

Matthew Hume Bedford, A. B. (Central University of Kentucky, 1903): Chemistry.

Thesis: *Columbates.*

Instructor in Chemistry, University of Maine.

Charles Frederic Brede, A. B., A. M. (Haverford, 1880, 1893): Germanics.

Thesis: *The German Drama on the Philadelphia Stage.*

Instructor in Northeast Manual Training School, Philadelphia.

Kent James Brown, A. B. (Dickinson, 1901): Germanics.

Thesis: *The Strong Verb in Fischart.*

Master in German in Carteret Academy, Orange, N. J.

John Linton Carver, B. S., A. M. (Swarthmore, 1893; Pennsylvania, 1903): English, Pedagogy.

Thesis: *The Valiant Scot, by J. W. Gent.*

Head of English Department, Friends' School, 15th and Race Streets.

Edward Samuel Corwin, Ph. B. (Michigan, 1900): History, Political Science.

Thesis: *The Attitude of France towards her Alliance with the United States in the American Revolution.*

Preceptor in History and Political Science in Princeton University.

Alice Lenore Davison, A. B. (Elmira College, 1902): Chemistry.

Thesis: *The Electrolytic Determination of Cadmium with the use of a Rotating Anode.*

Professor of Physics and Chemistry, College for Women, Columbia, South Carolina.

James Walker Downer, A. B., A. M. (University of Virginia, 1895, 1897): Latin.

Thesis: *Figurative Language in the Satiræ Petronius.*
University Fellow for Research in Latin.

Acting Professor of Latin, Friends' Central School, 15th and Race Streets.

Henry Fox, B. S., A. M. (Pennsylvania, 1899, 1903): Zoölogy, Botany, Chemistry.

Thesis: *The Pharyngeal Pouches and their Derivatives, in the Mammalia.*

Professor of Science, Temple College.

Robert Harvey Gault, A. B. (Cornell, 1902); Psychology, Neurology, Philosophy.

Thesis: *On Conditions Affecting the Maximal Rate of Voluntary Extensor and Flexor Movements of the Right Arm.*

Professor of Psychology and Pedagogy, Washington College, Charleston, Md.

Oliver Edmunds Glenn, A. B., A. M. (Indiana, 1902, 1903):
Mathematics.

Thesis: *The Determination of the Abstract Groups of Order, p^2 , qr , p , q and r being distinct primes.*

Professor of Mathematics, Drury College, Springfield, Mo.

Julius Hillel Greenstone, A. B. (Pennsylvania, 1902): Hebrew,
Arabic, Philosophy.

Thesis; *The Turkoman Defeat at Cairo.*

Instructor in Jewish Education, Gratz College, Philadelphia.

Ulysses Sherman Hanna, A. B., A. M. (Indiana, 1895, 1898):
Mathematics.

Thesis: *The Bitangentials of the Plane Quintic and Plane Sextic.*

Assisting Professor of Mathematics, University of Indiana,
Bloomington, Indiana.

Ernest Godfrey Hoffsten, B. S. (Pennsylvania, 1901);
English, Germanics.

Thesis: *The Floating Island, by William Strode, of Oxford, written in 1636, and now for the first time reprinted with introduction and notes from the quarto of 1653 in the possession of the University of Pennsylvania.*

Instructor in English, McKinley High School, St. Louis, Mo.

Robert Harbison Hough, A. B., B. S., M. A. (University of
Nashville, 1890, 1892): Physics, Mathematics, Chemistry.

Thesis: *On the Mechanical Equivalent of the Heat of Evaporation of Water.*

Instructor in Physics, University of Pennsylvania.

Solomon Huebner, B. L., M. L. (Wisconsin, 1902, 1903):
Economics.

Thesis: *The Business of Marine Insurance with Especial Reference to the United States.*

Instructor in Commerce and Insurance.

Charles Moore Magee, A. B., A. M. (Pennsylvania, 1895, 1904): English.

Thesis: *The Epigrammatic Art in English Literature of the Classical School of the Seventeenth and Eighteenth Centuries.*

6 First Ave., Conshohocken, Pa.

Alice Madeline McKelden, A. B., M. A. (Columbian University, 1899; Pennsylvania, 1900): Mathematics and Physics.

Thesis: *Groups of Order $2m$, that contain Cyclic Subgroups of orders 2^{m-1} 2^{m-2} 2^{m-3}*

Instructor in Mathematics, Girls' High School, Philadelphia.

Thomas Warner Mitchell, A. B. (University of Washington, (state) 1900): Economics.

Thesis: *Stockholders' Profits from Privileged Subscriptions.*

Secretary of the School of Commerce, Accounts and Finance of the University of the City of New York.

Richard Heinrich Herman Christian Carl Ludwig Reithmüller, Graduate of Karls gymnasium, Heilbronn A. N.; Theologisches Seminar, Maulbronn und Blaubeuren: Germanics.

Thesis: *Johan U. L. Gleim's Imitations of the M. H. G. Minnesong.*

Harrison Fellow for Research in Germanics.

Burnett Smith, B. S. (Pennsylvania, 1900): Geology, Mineralogy, Zoology.

Thesis: *Senility among Gastropods.*

Harrison Fellow for Research in Geology.

Ralph Ogden Smith, B. S., A. M. (Rutgers, 1902; Pennsylvania, 1903): Chemistry.

Thesis: *The Rapid Precipitation of Lead and Mercury in the Electrolytic Way.*

Instructor in Chemistry, University of Wisconsin, Madison, Wisconsin.

Charles Wharton Stork, A. B., A. M. (Haverford, 1902; Harvard, 1903): English.

Thesis: *All's lost by Lust, a tragedy by William Rowley, edited with an introduction and notes from the quarto of 1633 in the Library of the University of Pennsylvania.*

University Fellow for Research at Oxford, England.

Clarence Stratton, B. S. (Pennsylvania, 1901): English, Romanics.

Thesis: *The Unnatural Combat, a tragedy by Philip Massinger, reprinted with notes and introduction, from the quarto of 1639 in the Library of the University of Pennsylvania.*

Instructor in English, Central High School, St. Louis, Missouri.

Samuel Edwin Weber, Ph.B. (Lafayette, 1901): Pedagogy, Psychology, Philosophy.

Thesis: *The Charity School Movement in Colonial Pennsylvania.*

Professor of Education and Psychology in the Cortland State Normal School, Cortland, N. Y.

James Renwick Withrow, B. S. (Pennsylvania, 1899): Chemistry.

Thesis: *The Electrolytic Precipitation of Gold with the Use of a Rotating Anode and the Rapid Analysis of Halides.*

Assistant Instructor in Chemistry, University of Illinois, Urbana, Ill.

APPENDIX IV.

REPORT OF THE DEAN OF THE FACULTY OF LAW.

To the Provost of the University :

SIR : I have the honor to submit the following report for the year ending August 31st, 1905.

REGISTRATION OF STUDENTS.

The number of students as compared with the number of students during the scholastic year 1903-04 is as follows :

1903-04.		1904-05	
First year.....	116	First year.....	133
Second year.....	83	Second year.....	81
Third year.....	98	Third year.....	68
Specials.....	12	Specials.....	15
Partials.....	13	Partials.....	6
	<hr/>		<hr/>
	322		303

As indicated, though the incoming class was larger than during the previous year, there was a decrease in the total number of students in the Department. This decrease was due to the size of the graduating class in June, 1904, this class being the last class entering prior to the present regulations for the study of Law in Pennsylvania. The effect of these regulations I have referred to in my report for the scholastic year 1903-4.

CHANGES IN THE TEACHING FORCE.

At the July meeting of the corporation Mr. Thomas Raeburn White, Assistant Professor of Law, presented his resignation. Mr. White has been connected with the Department, since his graduation in 1899, as Fellow, Instructor, Lecturer, and during the past year as Assistant Professor. He is a

teacher of ability and the members of the Faculty learn of his withdrawal,—which is due to the increased pressure of his private business—with regret.

MATTERS PERTAINING TO THE COURSE.

The new courses given last year were a course in Torts, supplementing Judge Dallas's work of the first year class, one hour per week, by Assistant Professor Bohlen, and a course in Torts two hours per week, to the second year class, which was also given by Professor Bohlen. The number of regular electives in the third year was not increased, but in addition to the voluntary courses heretofore given in Conveyancing and in Bankruptcy, a voluntary course in Admiralty was given by Mr. John F. Lewis. Mr. Lewis's lectures were most successful and it is hoped that an arrangement can be made to continue these lectures on alternate years. Mr. Russell Duane, to the great satisfaction of the Faculty, again dealt in a series of six lectures with the subject of preparation for trial.

One of the most significant addresses of the year was that delivered by Mr. Frank Pritchard of the Class of 1874 on "Legal Ethics." The address had a distinct educational effect, and the Department has requested Mr. Pritchard to put it into permanent shape so that the same may be used hereafter as a part of the reading recommended to the members of the graduating class.

The annual address was delivered by Mr. David T. Watson, of Pittsburg, on March 31st. Mr. Watson chose as his subject, "Practical Suggestions." The occasion was made significant by the attendance of several hundred members of the alumni and local Bar and by the consequent success of the reception of the Society of the Alumni of the Department of Law, held immediately after the address, in the main hall of the Law School Building.

Besides the voluntary courses and public lectures mentioned, the University invited Mr. Henry Flanders to deliver a number of discourses on "Legal Biography." The subjects selected by Mr. Flanders were certain members of the Supreme Court of the United States; namely, "Justice Wilson, Justice Washington, Justice Patterson, Chief Justice Taney, Chief Justice Ellsworth, Justice Iredell, Chief Justice Marshall, Chief Justice Story, and Chief Justice Jay.

The lectures were an unqualified success, and many of our students will, I believe, as a result, carry through life an interest in the personality of the great men of the past of our profession, from which interest they will derive both pleasure and profit. The Faculty have heard with satisfaction that the Trustees have arranged for the continuation of the lectures during the coming year.

At the meeting of the Faculty held in March, a number of changes were made in the regular course, to take effect during the coming scholastic year. The course in Blackstone to the first year class was abolished. This action on the part of the Faculty does not reflect the belief that a knowledge of Blackstone is unimportant. Experience, however, teaches us that a course based upon a text book is not worth the time consumed in class. If the text book is part of the necessary knowledge of the student he should be made to pass an examination therein, but the class room hours should be devoted to work which cannot be done outside. The Faculty believe that every student should have a knowledge of Blackstone, and while abolishing the course, have retained the examination. In the future, therefore, as in the past, no student will graduate from the University without first passing an examination in that subject.

By an action of the Faculty taken some two years ago, the number of hours per week in the third year class was increased from twelve to fourteen. This added one subject

to each man's course. Experience seems to have proved that this addition was unfortunate and that a student obtains more from his year if he confines himself to a few subjects, but spends a sufficient time on each to insure complete mastery. A certain amount of information is indispensable to the successful practice of any profession, but beyond a point which is soon reached, the important thing for the professional student is to obtain a thorough grasp of fundamental subjects. This he cannot do if he is required to take in any one year a large number of subjects or fill his mind with information which he has no time to assimilate.

At the same meeting of the Faculty it was determined to add to our electives a course in Suretyship. Assistant Professor Hening will have charge of this course. The course in the Statute Law of the State of Pennsylvania was enlarged so as to make it a course in Pennsylvania Law. As modified, the course will be a voluntary one; that is, not a regular elective. The new course is designed to meet the needs of those who expect on graduation to present themselves to the State Board of Law Examiners of Pennsylvania for examination for admission to the Bar.

BIDDLE MEMORIAL LIBRARY

The accession number on August 31st, 1904, was 31,480; the accession number to-day is 33,311 or an increase of 1831. This increase is divided as follows:

Text books.....	664
Reports.....	688
Statutes.....	123
Digests.....	65
Encyclopedia.....	22
Periodicals.....	185
Ordinances.....	8
Bar Association Reports.....	7
Public Documents.....	28
Dictionaries.....	13
Trials.....	28
Total.....	<hr/> 1831

On account of the character of the books bought this increase is not as large as during the previous year. The features of the year in the way of accessions were the South African Colonial Reports; a number of old English text books, and a fine set of French *Arrets* combining the reports of all the principal courts in France. These were all purchased through the Alumni Fund; the Biddle Fund or annual income, owing to the repayment of the debt due to the corporation for advances, being only sufficient to cover the continuations and the new American text books.

152,558 volumes were taken out by undergraduates in Sharswood and McKean Halls. This number is not quite so large as during the preceding year. The decrease is probably due to the fact that last year the professors in two subjects published case books. The use of McMurtrie Hall for graduate study, steadily increases. A part of the year all of the desks were assigned. No record is kept of the exact number of books given out in McMurtrie Hall but the Librarian believes that during the winter the number exceeds an average of 300 books a day.

There has been an increased use of the Library by students registered in the College Department. Several professors connected with the Wharton School of Finance and Commerce use the Library constantly. As a valuable light is thrown on the History of English speaking peoples by the Law Reports and other works on the sources of the law, there is every reason to suppose that the use of our Library by the professors and students of the College will continue to steadily increase.

PRIOR EDUCATION OF STUDENTS.

The following is a tabulated statement of the education of the First Year Class prior to entering the Department:

Candidates who held college degrees.....	45
Candidates who had been members of the Junior Class in a college of standing.....	2
Candidates who had been members of the Sophomore Class in a college of standing.....	9
Candidates who had been members of a Freshman Class in a college of standing.....	15
Candidates who were graduates of high or normal schools..	39
Candidates who had passed examinations in subjects not covered by a diploma from high or normal schools.....	4
Candidates who passed the entrance examinations.....	9
Candidates who entered on the certificate of the Pennsylvania State Board of Law Examiners.....	15
	<hr/> 138

GEOGRAPHICAL DISTRIBUTION OF STUDENTS.

The states represented in the Department were as follows :

Delaware.....	4	Massachusetts.....	3
District of Columbia.....	5	New Jersey.....	27
Georgia.....	1	New York.....	2
Illinois.....	2	North Carolina.....	1
Iowa.....	2	Ohio.....	1
Kansas.....	1	Pennsylvania.....	255
Kentucky.....	1	Vermont.....	1
Maryland.....	3	Foreign Countries.....	3

SUMMARY.

New England States.....	4	Pennsylvania including Phila.....	255
Middle States.....	33	Foreign.....	3
Western States.....	6		
Southern States.....	11		

AGE OF STUDENTS.

The average of the entering class was slightly higher than that of the previous year, being twenty-one and six months as compared with twenty-one and two months for 1903-04.

RESULTS OF EXAMINATIONS IN COURSE.

Of the 256 regular students taking the June examinations, 39 or 15 per cent. plus, failed to pass a sufficient number of examinations to obtain higher standing; or in the case of third year students, to graduate. Of these 39, 20 were members of the first year class, 13 of the second year class, and 6 of the third. The figures are above those of the previous year, when 10 per cent. plus of all who took the examinations failed. The average examination mark given last year was 74.4; during the previous year 75.5.

SCHOLARSHIPS.

There were eight holders of Faculty Scholarships, seven holders of City Scholarships and one holder of a Muir Scholarship, registered in the Department. All these scholarships carry full tuition. The total assistance given amounted to \$2,560.

PUBLICATIONS OF THE DEPARTMENT.

During the past year, besides the legal works produced by the members of the teaching force, there have been published under the auspices of the Department, three monographs: one by Mr. Morris Wolf on "Suggestions as to the Nature and Extent of Liability of Telegraph Companies for Failure to Properly Deliver Messages;" another by Mr. Henry Sandwith Drinker, Jr., on "The Use of the Phrase *Res Gestæ* in the Law of Evidence in Pennsylvania;" and a third by Mr. Horace Stern, on "The Limitations of the Power of a State under a Reserved Right to Amend or Repeal Charters of Incorporation."

It is believed each of these monographs constitutes a distinct contribution to the law. They have been widely read by members of the legal profession.

THE PHYSICAL HEALTH OF THE STUDENT BODY.

The physical health of the student body has given the Faculty concern. The course in law is one of difficulty. The examinations, coming of necessity at the end of the year's work, are apt to be given under trying weather conditions, and thus the strain inevitably accompanying the taking of examinations in a professional school is increased. We do not believe that our course is too hard for men who come to us well prepared, and devote their time, systematically and regularly, to the prescribed work. But we do believe that our course is too difficult to be taken by the student who is not, in the fall of the year, in good physical condition, or, who being in good physical condition in the fall, does not take intelligent pains to remain so throughout the scholastic year. While observation seems to show that the majority of men who come to us leave us better physically for the regular and systematic work of the school, we have each year a number of men who are either obliged to abandon the course or who pursue it only by an undue strain on their physical powers. There are many causes beyond the control of the University which account for some of the physical breakdowns. One cause, however, is the lack of good healthy exercise. Franklin Field, being occupied very largely during the spring and fall by those students who are either on University teams, or trying for such teams, affords outside of its running track only a limited opportunity for men in the Law School to secure exercise. In view of the severe competition for places on any university team, and also in view of the severe rivalry between universities in athletic contests, and the publicity attendant on such contests, it is practically impossible, except in rare cases, for a man to pass through the Law School, do justice to his work and to his own future as a professional man, and take the time and mental energy necessary to become and remain a

member of any of our athletic teams. As a consequence only a small fraction of our students can obtain the physical exercise which is essential to their well being by taking part in University athletics. The new gymnasium building will, I believe, do much to remedy this situation. It affords an opportunity, which every student may embrace without undue loss of time, for some daily exercise. Indoor exercise, however, and especially exercise which does not involve the playing of a game, and the mental relaxation accompanying that fact, has of necessity its limitations. For students in professional schools, the great majority of whom have neither the time nor the desire to engage in the strenuous athletic contests of their more leisurely college days, what is needed is the opportunity to engage for a short period two or three times a week in the playing of some game, such as association football, tennis, etc., where the element of play and the desire to win and the interest excited thereby exists, but where there is an entire absence of strain and of that special preparation which is, of necessity, connected with inter-university contests. Now that we have our splendid Gymnasium no greater benefit could be conferred upon the professional student by the University, as I observe such student in the Law School, than the existence in the immediate neighborhood of the University of one large or several small fields where the students who do not wish to engage in University athletics could feel that they could play one or other of the games which I have mentioned, or others of like character.

Respectfully submitted,

WM. DRAPER LEWIS,

Dean.

APPENDIX V.

REPORT OF THE DEAN OF THE FACULTY OF MEDICINE.

To the Provost of the University :

SIR : In submitting to you the report of the Department of Medicine for the academic year 1904-1905, permit me to call your attention first to the number of matriculates in the first year class. This class numbers 176, as compared with 140 in the class preceding, a gain of 20%. This in itself is very gratifying but it seems to me all the more so when taken into consideration with the fact that the records of other medical schools would seem to show that there has been either a decrease, no increase at all, or but a slight increase in the number of matriculates. The record of this School is therefore unique. Not only is this so of the condition in the fall of 1904, but sufficient statistics are at hand at this writing to show that this will be more conspicuously true of the class matriculating in 1905. We are confronted therefore with two conditions, the general falling off in the number of young men entering the medical profession and the exceptional experience of the Medical Department of this University—conditions which call for an explanation. The decrease in attendance cannot be explained by increased entrance requirements alone. This unquestionably accounts for the decrease that is always experienced when the higher requirements are inaugurated for the first time. But what of those schools where the higher standards for admission have been required for a number of years? No one will contradict the statement that the medical profession is over crowded and that the prospects of earning a decent livelihood are not as bright as they once

were. At the present rate there will have graduated from the Medical Schools of the United States, 50,000 physicians in the first eight years of this century. From 1882 to 1902 there was an increase in the number of matriculates in Medical Schools of about 100%. Based upon the proportion at the present time of one physician to 6000 population, there would be needed with the natural increase of population and the deaths in the ranks of the profession, an increase of 3000 physicians each year. In 1902 there were approximately 5000 graduates of Medical Schools thus leaving a surplus of 2000 physicians over and above that required to meet the demands. These statistics are quoted simply to show the over-crowded state of the profession and the increasing difficulties of its members to obtain a livelihood.

In Germany, for example, and in France, too, where the number of physicians proportionate to the population, is smaller than it is in this country, there is reported a decided diminution in the total number of medical students. It is believed by some that other professions, particularly the engineering profession, are attracting a larger number of young men at the present time.

To explain the increase in the number of matriculates at the University a number of factors must be taken into consideration. The completion and equipment of the New Medical Laboratories have been most influential factors. The increase in the facilities of laboratory instruction thus offered, together with the elaboration of a more comprehensive course in the clinical subjects have doubtless influenced a certain number of students in the selection of a medical school. The clinical material at our disposal is used to better advantage now than it ever has been in the past. But besides these educational advantages much of the increased popularity of the University is doubtless due to the constant efforts which are being made to make the student's life happier and to consider his welfare and advantage in every detail.

Many changes have been made in the curriculum, most of them consisting in expansion of the various courses. At the present time, however, every possible hour, within the limitations of the student's capacity, has been utilized and no radical changes will be rendered possible until a fifth year has been added to the curriculum. It is only a question of time, however, and that not very far distant when this radical step must be taken, since under the present conditions the student's time is so occupied with the regularly scheduled work and exercises, that he has scarcely any opportunity to review and digest the facts he has learned or to broaden his mind with collateral reading. When the day's work is done the average student has reached the limit of his capacity for any work which taxes his mental faculties and requires concentration of thought. This must be recognized as an unfortunate state of affairs, from which under the present régime there is no escape.

The teaching of medicine is daily becoming more and more complicated and the very nature of the advances, which have been made in the field of medicine, makes greater demands upon the student's intelligence, upon his knowledge of certain fundamental subjects, and upon his ability to appreciate the value of and to apply the scientific facts which he has obtained in the laboratory to the practical aspects of clinical medicine. It has well been said that "Modern Medicine consists of those facts, gathered from the various sciences, that are capable of utilization in either the prevention or cure of disease. All the physical sciences, at least the fundamental ones, have made and are still making contributions to medical knowledge and medicine can advance no faster than the sciences on which it is founded."

In order that the student may fully understand the subjects of the medical curriculum, as they are taught to-day, his preliminary education should include studies which are strictly speaking preparatory to his course in medicine. As

matters now stand a student may enter the Department without any preparation whatsoever leading up to his entrance upon the study of medicine. Looking at the matter solely from the standpoint of the student's best interests it is not fair that he should be allowed to undertake a course for the proper understanding of which he is unprepared. It is unreasonable to expect him to comprehend, for example, Ehrlich's side-chain theory or to understand the assimilation and utilization of food products in the human body if the individual has not had already a thorough course in the fundamental facts and theories of general medicine. It is unfair to expect him to understand the microscope, laryngoscope, X-rays, the mechanical principles involved in the causation and treatment of fractures and dislocations and in the production and correction of deformities, unless he is thoroughly familiar with the principles of physics. It will not be possible for him to keep in touch with the advances in medical science unless he has a reading knowledge of German and French.

I therefore recommend, Mr. Provost, for your serious consideration the question of increasing the requirements for admission to this department. It has always seemed to me improbable that the time will ever come when the degree of Bachelor of Arts or Science will be required for admission to all the high grade medical schools of the country. While it is more than desirable that the physician should be a man of culture, it does not follow that because an individual has pursued a course leading to the degree of Bachelor of Arts, he has received special preparation for the study of medicine. What should be required of a student seeking admission to a medical school is not a certain specified number of years of preliminary education, but a knowledge of certain specified subjects, subjects which will fit him for the course he is about to pursue. It is not necessary to discuss these in detail, but they may be said to include physics, chemistry, botany, zoölogy, comparative anatomy, and a reading knowledge of French and German. Such a preparation would be equivalent to that which

is required for admission to the Graduate Departments of the German Universities. The subject which above all others is engaging the minds of those interested in medical education is this question of entrance requirements. From one end of the country to the other the best element of the profession is exerting its influence through the State Boards of Medical Examiners and through other channels, in favor of higher standards, and each year we find more institutions added to the number of those which require more than a high school education. The Council on Medical Education of the American Medical Association presented a report upon the minimum requirements for admission to Medical Schools. The report was accepted and, if adopted by the State Boards of Medical Examiners, will require of each applicant on and after January 1, 1908, that he shall have had a five-year medical course, the first year to be devoted to physics, chemistry, and biology and such arrangements should be made that this year could be spent either in a school of liberal arts or in the medical school. Reference is made to this report simply to show the views that are prevailing throughout the medical profession. I am quite sure that the reputation of this department suffers to a very considerable degree from the fact that its requirements for admission have not been advanced commensurately with the advances that have been made in the medical sciences. This is unfortunate since in other respects, in its equipment, in the arrangement of its curriculum, and in its method of instruction, the department is held in high esteem.

Recognizing the desirability of increasing the number of matriculates who have had a college education, I would propose the incorporation of a plan whereby students from those literary colleges equipped to give thorough courses of instruction in bacteriology, chemistry, histology, and biology, be admitted to our second year class. The Dean of the Medical Department of the University of Chicago, in a recent letter to me, in speaking of the question of admission to advanced standing for work done in literary or scientific colleges, says

that "in many respects this is one of the most important questions which now present themselves to the Medical Colleges." These students would have received instruction in all the subjects covered in the first year of the medical curriculum with the single exception of human anatomy. In order that the student receive adequate instruction in this subject to make him eligible for admission to advanced standing, a systematic course of instruction in human anatomy might be included among those given in the Summer School. By such an arrangement we could offer students of literary colleges, not affiliated with a University, the same advantages offered the students in attendance at our own College Department, namely, two degrees in seven instead of eight years. Such a plan would, I believe, attract a number of students, who, having entered a literary college and planning eventually to study medicine, would be glad of the opportunity to save one year in the acquirement of their degrees. I propose this plan at this time because both in actual number and in percentage there are fewer students holding college degrees in the present first year class than in the class immediately preceding. There is also a slight decrease in the total number of students who have spent one or more years in a literary college.

One of the most important functions of a University is the fostering of research. There is no phase of medicine which does not offer an attractive field for original investigation; it is as true of the subjects touching upon clinical medicine, as of those dealing with the pure sciences. The opportunities of the practicing physician engaging in research are necessarily somewhat limited, owing to the demands made upon his time. The time of those engaged in the instruction of the pure sciences is free excepting at those hours set apart for lectures or demonstrations. Thus the fewer the number of hours of instruction the greater the number available for research. The members of our laboratory staff are I believe handicapped in this respect by the number of hours which

they must devote to student instruction and it would be well if some means could be adopted whereby they could have more time to engage in investigation. The present objectionable state of affairs might be alleviated to some extent, at least, if the Departments of Dentistry and Veterinary Medicine would provide as many demonstrators as may be necessary to conduct those courses of instruction given under the auspices of the Medical Department, namely, the courses in chemistry, anatomy, bacteriology, physiology and pathology. It is quite proper that the courses of instruction in these respective subjects should be open for all students of the University irrespective of department, but if this plan is continued, the staff should be increased. At present the staffs are no larger than is necessary to meet the demands of a department of Medicine. I respectfully propose therefore that the addition to these staffs be made sufficient to meet the burden imposed upon this department by those of Dentistry and Veterinary Medicine.

We regret to have lost by resignation from our teaching staff, Dr. Adolph W. Miller, first a Demonstrator and later an Assistant Professor of Materia Medica, and Dr. Robert W. Formad of the Histological Department, both of whom, for the past twenty and eighteen years respectively, have rendered the University most faithful and efficient services. We record also with regret the resignation of Dr. John M. Swan, who for the past ten years has been associated with the Department of Anatomy, first as Assistant Demonstrator of Anatomy and later as Demonstrator of Osteology, and of Dr. Arthur F. Coca, who served since 1900, first as Assistant Demonstrator and later as Demonstrator of Pathology.

HOSPITAL APPOINTMENTS

It is gratifying to be able to report that of the graduating class 73% received hospital appointments. Of the remaining members of the class, some refused appointments to engage

immediately in practice, others accepted positions as assistants, and some signified their intention of applying for admission to the medical services of the Army and Navy.

TABULATED STATISTICS.

TABLE I.

Fourth-year.....	131
Third-year.....	104
Second-year.....	130
First-year.....	176
Special.....	4
	<hr/> 545

TABLE II.

Candidates who held college degrees.....	34
Candidates who had been members of the Senior Class in a college of standing.....	9
Candidates who had been members of the Junior Class in a college of standing.....	6
Candidates who had been members of the Sophomore Class in a college of standing.....	15
Candidates who had been members of the Freshman Class in a college of standing.....	16
Candidates who had passed the entrance examinations.....	10
Candidates who had passed examinations in subjects not covered by diplomas from high school or normal school.....	15
Candidates who were graduates of high or normal schools, academies or seminaries.....	71
	<hr/> 176

TABLE III.

Alabama.....	2	Missouri.....	1
Arkansas.....	1	Nebraska.....	1
California.....	2	New Hampshire.....	5
Colorado.....	2	New Jersey.....	37
Connecticut.....	4	New York.....	21
Delaware.....	4	North Carolina.....	4
District of Columbia.....	4	Oklahoma.....	1
Florida.....	2	Ohio.....	18
Georgia.....	1	Oregon.....	1
Illinois.....	3	Pennsylvania.....	346
Indiana.....	6	Rhode Island.....	2

TABLE III. (Continued)

.....	3	South Carolina.....	1
.....	2	Texas.....	6
.....	5	Utah.....	2
.....	3	Vermont.....	1
.....	7	Virginia.....	4
setts.....	15	Washington.....	4
l.....	4	West Virginia.....	7
si.....	1	Wisconsin.....	1
		Foreign.....	11

SUMMARY.

land States..	30	Pennsylvania, including	
ates.....	91	Philadelphia.....	346
States.....	11	Middle West.....	23
States.....	33	Foreign.....	11

APPENDIX VI.

REPORT OF THE DEAN OF THE FACULTY OF DENTISTRY.

To the Provost of the University:

SIR: I have the honor to submit the following report of the condition of the Department of Dentistry for the the academic year 1904-05:

The total number of students matriculated, 1903-04,	359
Students of the Third Year	168
Students of the Second Year	81
Students of the First Year	90
Special Students	20
	— 359
Number of new matriculates, including those admitted to advanced standing	141

Those admitted to advanced standing presented certificates from the following institutions:

Australian College of Dentistry, Melbourne, Australia.....	3
Cincinnati College of Dental Surgery	1
Dental College of Geneva, Switzerland	1
Faculty of Physicians and Surgeons, Glasgow.....	1
Georgetown University, Dental Department	1
L'école Odontotechnique, Paris, France.....	1
Liverpool Dental Hospital, Liverpool, England	1
Medico Chirurgical College, Dental Department.....	1
Milwaukee Medical College, Dental Department	1
New York College of Dentistry	6
New York Dental School	1
Pennsylvania College of Dental Surgery	3
Pittsburg Dental College.....	1
Philadelphia Dental College	11
Royal College of Dental Surgeons, Ontario, Canada.....	1
Royal Dental Hospital, London, England.....	1
State University of Iowa.....	1

University of Breslau, Germany.....	1
University of Buffalo, Dental Department.....	1
University College of Medicine, Dental Department.....	1
University of Freiburg, Germany.....	1
University of Illinois, Dental Department.....	1
University of Liege, Belgium.....	1
University of Michigan, Dental Department.....	1
University of Southern California, Dental Department.....	1
University of Turin, Italy.....	1
Tokyo Dental College.....	1
Yale University.....	1
University of Zurich.....	3

The numerical representation of the several states and countries in the Department is as follows :

Middle States.....	186
Western States.....	12
New England States.....	52
Southern States.....	12
Pacific States.....	3
Australia.....	23
Austria.....	2
Belgium.....	1
Brazil.....	3
British West Indies.....	4
Canada.....	12
Chile.....	5
Cuba.....	2
District of Columbia.....	1
England.....	3
France.....	3
Germany.....	3
Holland.....	1
Italy.....	1
Japan.....	2
Mexico.....	2
New Zealand.....	13
Porto Rico.....	1
Russia.....	3
Scotland.....	1
South Africa.....	1
Spain.....	1
Sweden.....	1
Switzerland.....	4
Syria.....	1

SUMMARY.

United States.....	267
Foreign countries	92

The amount of work performed in the Operative and Mechanical Department has been as follows:

Number of clinical operations.....	28,194
Number of mechanical operations, including crown-and- bridge work and technic work.....	4,155
Number of patients.....	14,637
Amount of gold used for fillings exclusive of that used in mechanical work, ounces.....	95
Number of students in the graduating class.....	168
Number of students who received the degree	153

The total number of matriculates for the session 1904-05 is 359, being three less than the total number for the preceding session. A comparison of the totals of the first year registration as between this and the previous session shows an increase of 18 matriculates for the present first year class over the total of the same class for the preceding session. This increase in the first year registration is a gratifying indication of the tendency towards a return to our normal registration figures which were temporarily disturbed because of the agitation connected with the proposed four years' curriculum that was subsequently abandoned as stated in my previous report.

The number of matriculates admitted to advanced standing from other institutions for the present session is 50, being three less than the previous session, the close approximation of these two totals indicating that our relationship in this particular to other dental educational institutions continues to be normal and satisfactory. The cosmopolitan character of our student body has always been a characteristic feature of the Department of Dentistry. The total number of matriculates admitted from foreign countries for the previous session was 87 and for the present session 92, an increase in

foreign matriculates of about $1\frac{1}{2}$ per cent. of the total registration for the present session. A large proportion of those coming to us from foreign countries are qualified dental practitioners who enter the Department for post-graduate work. They are an especially desirable group of students from the fact that they represent a class that is seeking the highest professional equipment for its intrinsic value to them as practitioners and who are willing to secure the desired training at the cost of large personal sacrifice of time and money. The increase in the number of this class of earnest students is therefore a gratifying index of the reputation which our institution has achieved and is maintaining abroad, a position which is being continually strengthened by the loyalty of these same men when as our alumni they are scattered over all civilized countries of the globe.

With the concurrence of the administration the Faculty of the Department of Dentistry has officially announced an increase in the charge for tuition fees to \$150 per annum upon all new matriculates for the session of 1904-05. The wisdom and equity of this change is evident when it is considered that notwithstanding the enormously increased cost of furnishing a dental education in accordance with modern standards the present tuition charge is the same as that which has been in vogue for the past half century. Increased cost of equipment, involving laboratories elaborately fitted with expensive appliances, new additions to the curriculum, an increased teaching force and generally enlarged plant have combined to bring about the necessity for a more equitable charge for these improvements and facilities accessible to the dental student of to-day and it is confidently believed that the self-evident justice of the increased fee will be cheerfully and practically concurred in by future incoming classes.

There is an aspect of the clinical service of the Department of Dentistry which is worthy of attention, namely, its

importance as a public charity. The figures given in this respect representing the number of patients treated during the year do not include a considerable number who apply for the relief of pain and distress arising from dental troubles and various surgical diseases of the mouth and jaws. Inclusive of this latter class of cases, the total number of patients who have received attention during the year would considerably exceed fifteen thousand, and the service rendered to this large number of people has been gratuitous with the exception of a minimum charge for material where that has formed a necessary part of the treatment.

The service of dentistry, while it is less conspicuous than that of medicine or surgery from the fact that it less frequently involves the issue of life and death, is nevertheless a service for the relief of suffering, the improvement of personal appearance, and the betterment of the function of mastication, in the fulfilment of which latter office it is directly concerned with bodily health. It is for these reasons that I deem the clinical work of this Department to be worthy of recognition as one of the important charitable services which the University is conducting for the public welfare as well as in the interest of its own educational work.

There are two sources of educational activity connected with the Department to which I have not heretofore referred but which I deem now worthy of note, namely, the undergraduate dental Societies and the Penn-Dental Journal.

There are in active operation three undergraduate dental societies that hold regular meetings throughout the Academic session, in all of which papers upon topics of professional interest are read and discussed. The training afforded in this association work is of inestimable value to the participants not only in improving their powers of observation and precise reasoning, but as a preparation for a phase of future activity that is essential to professional success.

The prominence taken by our alumni generally in the larger activities of dentistry throughout the world is, in the judgment of our Faculty, in no small degree attributable to the excellence of the training which as undergraduates they have practically received in dental society work.

A worthy adjuvant to the activities of the undergraduate dental societies is the Penn-Dental Journal, the official professional organ of the dental student body. This periodical which is issued bi-monthly, was first issued in 1897. It constitutes the outlet for the best literary work of the undergraduate societies and of the student body generally. It is wholly under student management and has attained an enviable position among publications of its class, being frequently quoted by the leading professional periodicals both in this country and abroad. Its educational value is its most important feature, in which respect it is analogous to that of the undergraduate organizations. The journal has a considerable circulation among our alumni as well as among the undergraduate body. It has been self-supporting from the beginning.

No changes have taken place in the personnel of the teaching staff nor have any important changes been made in the curriculum.

I have pleasure in commending to your attention the general excellence of the work accomplished by the teaching staff during the session, and of recording the satisfaction felt by all connected with the Department of Dentistry as well as by its Alumni generally by reason of the formal recognition of the distinguished services to dentistry by a member of our faculty, Dr. James Truman, upon whom the University conferred its honorary degree of Doctor of Laws on "University Day" of last year.

Respectfully submitted,

EDWARD C. KIRK,

Dean.

APPENDIX VII.

REPORT OF THE DEAN OF THE FACULTY OF VETERINARY MEDICINE.

To the Provost of the University :

SIR : I have the honor to present this report on the Veterinary Department for the year ending August 31st, 1905.

The attendance of students during the year was as follows :

Students of the Third year class.....	13
Students of the Second year class.....	29
Students of the First year class.....	36
Special student.....	1
Total.....	79

The temporary building at 39th Street and Woodland Avenue that had been occupied by the Veterinary School and hospital since 1901, has continued in service during the past academic year. All plans for improving the courses of instruction are held in abeyance pending the provision of better facilities for teaching, as, under existing conditions all available energy and efforts are required to keep the grade of instruction up to previously established standards.

It is, therefore, with much gratification that I am enabled to refer to the reception of a gift of \$100,000 from a friend of the School, whose name is not to be revealed, and of an appropriation of \$100,000 from the Commonwealth. The income from the first mentioned donation is to be used for the support of the work of the Department, while the appropriation made by the Legislature and Governor is to be used for the erection of a much needed building.

Each of these provisions is most timely and encouraging, and each goes far to meet a vital need of the Institution. To the members of the Veterinary faculty, who have for years labored and sacrificed for the School with patience and devotion, the most encouraging feature of these additions to the resources of the Department is that now the permanency of the School and of the results of their work is assured.

Coupled with the appropriation from the Commonwealth is a stipulation to the effect that in the building that is to be erected with the public funds, laboratories shall be provided for the use of the State Livestock Sanitary Board in its work of investigation concerning the diseases of domestic animals. This arrangement, viewed broadly, appears to be of considerable advantage to the Commonwealth and to be useful to the School as well, in that it makes it possible for the School to be of more direct and of larger service to the State. Undoubtedly, the laboratory and research work of the State Livestock Sanitary Board can be done more satisfactorily, under more favorable conditions and at less expense at the Veterinary School than at any other place in Pennsylvania. At the same time there are educational possibilities associated with this work that would be lost if it were conducted elsewhere.

On the sixth of July a fire, due to an unknown cause, occurred in the temporary building of the Veterinary Department, which resulted in the destruction of the second floor of the building with its contents, and in considerable damage to the contents of the first floor. It has been possible to repair the building so that the work of the School and the hospital may proceed without material interruption. The most serious loss consisted in the destruction of the

museum specimens stored on the second floor. These specimens represented the accumulations of twenty years and it will be difficult to replace many of them.

The demands upon the School for veterinarians for special service continue greater than the supply. With the increased facilities that will be provided in the new building, additional instruction will, no doubt, be provided that will make it possible to furnish the extra training that is so urgently needed.

There is convincing evidence to show that the services of veterinarians are in increasing demand. The livestock industry is growing in all of its departments, excepting sheep husbandry, and so the interests that depend upon veterinary protection are enlarging. The farm animals of the United States have increased in value, according to the statistics gathered by the Secretary of Agriculture, \$249,000,000 since the census of 1900, or 9 per cent. Moreover, the services of veterinarians are becoming more valuable through the better training afforded by the schools, and are better appreciated than formerly. All of this has the effect of increasing the demands upon our school, which, fortunately, is now in position to prepare to more fully meet these demands. Altogether, the outlook for the future is bright and encouraging.

With regard to the arrangement of the various courses of instruction, especially where the teaching of veterinary students interlocks with that of medical students, there is in some branches a need for readjustment that will lead to more specialization of teaching. This need has long been recognized but the School has not had the staff, space or supplies for doing the work that has been desired by the

faculty and students. The medical department has heretofore supplied and continues to supply invaluable assistance, which is very highly prized and appreciated. This question of the inter-relations of veterinary and other courses of instruction in Universities is now being actively discussed in European veterinary periodicals, on account of the closer relations that are being effected between veterinary colleges and Universities. The two Swiss veterinary schools, until recently separate and independent institutions, have been incorporated with the Universities of Bern and Zürich. The veterinary school in Munich is to become a department of the University of Munich, with a separate faculty. The Universities of Leipzig and Giessen have long had veterinary departments, and there is a movement on foot to join the veterinary schools of Berlin and Budapest with the Universities in those cities. In every case, the integrity of the organization of the Veterinary School and faculty is preserved, and the chief gain to the Veterinary School results from the right of its faculty to grant a University degree, and there is some saving in the equipment of laboratories and in providing instruction, by avoiding unnecessary duplication. All of this European development and experience is illuminating, and some of it is sure to be of service to us in the development of our work.

Plans for the new school and hospital buildings are being prepared with great care and are now practically complete.

Respectfully submitted,

LEONARD PEARSON,

Dean.

APPENDIX VIII.

REPORT OF THE LIBRARIAN.

To the Provost of the University.

SIR: I have the honor to present the report of the Library for the year ending August 31, 1905. The past year has been marked by a decided increase, both in the number of those registered as using the Library, and in the circulation of the books. As against 1729 noted for the year ending August 31, 1904, the number of readers registered for the past year was 1989, while the circulation of books reached the number 62,651 as against 53,854 for the preceding year, representing an increase of fifteen per cent. in the number of readers and of sixteen per cent. in the circulation.

The increase in the use of the Library extends to all departments, but is particularly noticeable in the College and in the Department of Philosophy. If, in addition to the figures furnished by the statistics of the Circulation Department, we consider that the students taking technical courses, Architecture, Chemistry, Civil and Mechanical Engineering, and Physics, as well as those pursuing Biological studies and Psychology, have special libraries at their disposal that are in constant use; and that the Law Library, which has its separate administration, is frequented by a daily average of over four hundred students, it will be safe to say that all but a very small percentage of the total registration of students in the University avail themselves of the privileges offered by the Library, and are dependent for help in their studies upon material furnished by the University's collections of books. This is, of course, as it should be, but it is worth noting that thanks to the active co-operation of the Provost and of the Library Committee it has been possible to bring the Library

much nearer to the standard required for the work mapped out in the various departments of the University.

On the other hand, it must be borne in mind that, corresponding to the steady growth of the University, the demands made upon the Library necessarily increase, and I feel, therefore, impelled at the outset of this report to urge again upon you, Mr. Provost, and upon the Board of Trustees, the imperative need of a more adequate Library endowment. In order to defray the cost of annual subscriptions to periodicals, and to have a substantial balance each year to continue the work of completing our files of periodicals and serial publications, an endowment of one hundred thousand dollars is needed. Of the large number of subjects represented by the departments of the University, only two, English Literature and Medicine, are provided with special endowment funds. We need similar funds ranging from five to ten thousand dollars for Architecture, Astronomy, Botany, Chemistry, Civil Engineering, Dentistry, Comparative Philology, Geology, Germanic Languages, Greek, History, Latin, Mathematics, Mechanical Engineering, Philosophy, Physics, Romanic Languages, Semitic Languages, and Zoölogy. For the division of History we have a nucleus in the fund of one thousand dollars contributed a few years ago by Mrs. Charles Stillé, with the interest of which a considerable number of valuable works have already been purchased. For Philosophy, also, we have a nucleus in the Krauth Fund, yielding about seventy-five dollars a year; and we likewise have a fund from the Pennsylvania Society for Promoting Agriculture, yielding about fifty dollars annually, which can be used for certain classes of books of value to the department of Botany. If these funds, and particularly the first two, could be increased to five thousand dollars, the work in the departments in question would be greatly facilitated. While there are pressing needs in all departments, I should like particularly to emphasize at present, next to the Periodical Fund, the necessity for more ample funds for History, which

covers such a large field and comprises various subdivisions both in the College and in the Graduate School. Would it not be possible to interest some among the numerous friends of the University to the extent of providing these special funds so urgently needed, ranging from five thousand to ten thousand dollars, to be devoted to the purchase of books on subjects designated by the donors, and the fund to be named in accordance with their wishes? It may be noted that all books purchased out of any special fund for the Library are marked by a book-plate designating the name given to the fund or the name of its donor.

GIFTS.

While during the past year the Library has not received any very large collections of books, smaller collections and single volumes, as well as monographs and pamphlets, have been received in such large numbers that it was found necessary to secure additional cataloguers in order to dispose of the rapidly growing accumulation. Among those who have regularly forwarded books of a miscellaneous character to the Library may be mentioned, as in former years, Provost Harrison, Dr. S. Weir Mitchell, Mr. J. G. Rosengarten, and Dr. Talcott Williams. Additions to the Text Book Library have been received from W. B. Saunders and Company, whose generosity in forwarding almost all of their medical publications merits especial mention, Messrs. Scott, Foresman and Company, William Wood and Company, and P. Blakiston's Sons; and the J. B. Lippincott Company invariably respond with the greatest courtesy to any request coming from the Library. Other individual donors were Professor E. J. Houston, who sent a set of his own publications, Dr. Horace Howard Furness, who donated four early and now rare editions of Sanskrit productions, and Hon. Mayer Sulzberger, who sent a number of interesting Armenian books. A gift of unique interest came to us from Mr. J. Hartley Merrick, of the Class of 1890, College, consisting of complete files of College

periodicals, as follows: *University Magazine*, *Chaff*, *Pennsylvanian*, *Red and Blue*, *Examiner*, and *Punch Bowl*, and also a file, not quite complete of the *University News*. With the kind co-operation of Dr. Ewing Jordan the Library also succeeded in completing its file of "Class Records," so that with Mr. Merrick's valuable gift we now have a practically complete collection of the material issued by undergraduates, that will be of service to the future historian of the University. The following members of the Faculty have very generously given the Library copies of their own publications,—Professor A. T. Clay, Dr. C. W. Dulles, and Dr. C. H. Frazier.

Among donations to the Library for special purposes we have received, in addition to the customary gift of three thousand dollars from a friend of the University (of which two thousand was given for books and one thousand dollars for subscriptions to periodicals), one hundred dollars from Mr. Samuel Castner, Jr., to purchase facsimiles of Vatican and Ambrosian codices, and one hundred dollars from Mr. J. G. Rosengarten for the purchase of current books pertaining to History; fifty dollars from the Society of the Alumni (College) for books of a general character for the benefit of College students. Messrs. William Dreer, Joseph Morwitz, and John W. Pepper contributed \$427 as a special fund for the purchase of botanical books. Mr. Rosengarten also placed at the disposal of the Department of History \$250 for the purchase of important serials, and another sum of six hundred dollars was subscribed by a friend of the University to enable Professor Cheyney to secure some important sets of memoirs and publications of historical societies needed for the work of graduate students. The same friend defrayed the cost of completing our set of the *Journal of the Royal Asiatic Society*.

FUNDS AND ACCESSIONS.

In addition to the special gifts, the Library had at its disposal, as in former years, \$1507.97, representing the income from the Agriculture, Krauth, Lippincott, Norris,

Pepper, Stillé, and Wagner Funds. An appropriation of \$1800 for periodicals was made by the Board of Trustees, supplemented by a special grant to cover a deficit of \$54.82. The Library also received \$1434.90 from the George Leib Harrison Foundation, of which sum \$253.33 represents a balance carried from the Fellowship Fund for 1903-04, and the remainder, \$1181.57, representing a maximum appropriation of one hundred dollars from each of sixteen Fellows. Out of the fund of lapsed balances we spent \$101.59. Out of a fund obtained from the sale of duplicates, fines collected by the Library, and the fees of special readers, \$406.41 was expended. Adding to this the amount of special gifts reported above, \$4301.98, we have \$9607.67 as the total sum spent for books and periodicals. During the year \$1731.27 was spent for binding, making a grand total for books and binding of \$11,338.94.

The accessions to the Library since August 31, 1904, were 8534 volumes, bringing the total number of books accessioned in the main Library on August 31, 1905, to 211,545. The Librarian of the Law Library reports that 1831 volumes were added during the year to the Biddle Memorial Library, making a total of 33,311, or a grand total of 244,856 volumes at present in the University's collections. The distribution of additions to the Main Library is represented by the following list :

	Gifts	Purchases	Total
General works.....	311	251	562
Philosophy	58	234	292
Religion.....	616	149	765
Sociology and Economics.....	1330	419	1749
Philology	285	188	473
Natural Science.....	538	667	1205
Useful Arts.....	372	144	516
Medicine	447	188	635
Fine Arts.....	119	71	190
Literature	756	835	1591
History	559	559	1118
Totals.....	5391	3705	9096

The difference between the total, 9096, and the accessions, 8534, represents books that were in the process of cataloguing at the date of the previous report.

PERIODICALS AND EXCHANGES.

As in former years, additions to periodicals have been made, largely through the Exchange Bureau and in part through gift. We at present receive 1360 periodicals, of which 662 are obtained by subscription, 197 through the Exchange Bureau, and 501 represent gifts.

A comparison of the number of exchanges received during the past year shows an increase of over 1300 entries. This increase is to be directly ascribed to the activity of the Exchange Bureau, through which we are steadily coming into closer touch with the universities, colleges and learned societies of this country, Europe and Asia. The willingness with which foreign institutions in most cases accede to a request for an exchange of publications, may be regarded as an indication of the value of what is published by the University, and it is therefore particularly desirable that adequate funds should be placed at the disposal of the University Publication Committee, to enable it to extend this important branch of the University's functions.

CATALOGUING.

The total number of volumes catalogued during the year was 8839, of which number 7341 represents the work done by our regular force and 1498 that done by the extra cataloguer engaged for the Jastrow Memorial Library and for the Brinton Collection. In addition, 3005 pamphlets and 1107 dissertations were catalogued, for the greater part by our own force.

REPORT OF EXCHANGES—1904-1905.

	Sept.		Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		Aprl.		May.		June.		July.		Aug.		Total.	
	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.	b.	ub.
U. S. Government.	4	30	8	12	37	30	36	113	33	32	38	13	42	19	37	66	32	37	11	10	29	17	23	172	330	551
Foreign Govern'ts.	4	8					14	3	23	2	13		23		2	22	1	7		7	7	5	2	16	21	147
State	11	3	5	1	66	87	90	1	7	6	6		24	9	9	4	25	7	27	11	34	78	1	5	305	213
Municipal	1	2	4				8	1	1	2	5	1	3		3	3	2	2	3	2		1	3	2	23	31
U. S. Universities.	2	66	20	10	3	51	5	17	10	49	8	78	2	42	12	72	8	88	7	115	6	54	4	37	87	679
Foreign "	1	71	2	242	1	1811	2	29	7	200		11	11	23	1	115	14	197		280		28	1	25	40	3082
Schools and Educational Societies.		20			1	13		3		3		3				7		5	1	10		3		2	2	69
U. S. Academies and Learned Societies.	2	11	1	8	1	3		11	2	12	2	9	2	3	2	14	2	5	3	9	5	6		13	22	104
Foreign Academies and Learned Societies.	2	1			2	7	2	28	8	7		21	1	1	1	29	60	85	2	1	2	20		19	80	219
Libraries.		3			2	7		4	1	5		2	1	17	1	48	1	24		2		10		5	6	127
Hospitals and Charitable Institutions.		7						4		4		5	2	23		40		3		2		15			5	135
Religious Organizations.	1	1			1	5		1		3		4		6		8		5	1	5		4	2	1	5	43
Social Clubs.					3					2						1		1	3			1		44	6	49
Railroads.		4		10	2	7																			2	21
Miscellaneous			1	1	5	13		3	2	23	1	174	2	24	16	109	4	15	1	5	1	9		5	35	386
Total	28	227	41	284	127	2093	139	288	74	364	56	335	90	100	84	538	149	451	59	459	84	251	38	346	999	5906

The detailed statistics of the cataloguing department are as follows :

Date	Works	Vols.	Cards	Pph.	Diss.
Aug. 29 to Sept. 24, 1904.....	167	300	1365	62	...
Sept. 26 to Oct. 22.....	84	638	1502	11	...
Oct. 24 to Nov. 26.....	244	893	2067	1215	...
Nov. 28 to Dec. 24.....	251	701	2101	62	...
Dec. 26 to Jan. 28, 1905.....	266	575	3014	45	358
Jan. 30 to Feb. 25.....	119	399	1715	231	64
Feb. 27 to Mar. 25.....	176	540	2594	85	245
Mar. 27 to April 22.....	252	585	2496	35	230
April 24 to May 27.....	257	824	2817	131	210
May 29 to June 24.....	436	783	2021	675	...
June 26 to July 22.....	270	634	2328	163	...
July 24 to Aug. 26.....	94	469	1436	95	...
Total.....	2616	7341	25456	2810	1107

CATALOGUING OF ACCUMULATION.

Date	Works	Vols.	Cards	Pph.	Diss.
Aug. 29 to Sept. 24, 1904.....	63	64	604	...	...
Sept. 26 to Oct. 22.....	84	91	1025	...	...
Oct. 24 to Nov. 26.....	50	54	850	...	...
Nov. 28 to Dec. 24.....	182	338	622	...	...
Dec. 26 to Jan. 28, 1905.....	189	219	892	...	...
Jan. 30 to Feb. 25.....	119	224	1085	...	...
Feb. 27 to Mar. 25.....	219	286	2022	186	...
Mar. 27 to April 22.....	142	170	1066	9	...
April 24 to May 27.....	47	52	414	...	...
May 29 to June 24.....	...	...	....	...	...
June 26 to July 22.....	...	...	....	...	...
July 24 to Aug. 26.....	...	...	....	...	...
	1095	1498	8580	195	....
	2616	7341	25456	2810	1107
Total for year.....	3711	8839	34036	3005	1107

BINDING.

The work of the binding department for the past year was considerably larger than the year before, owing to the larger number of books received unbound, and to the increase in the number of volumes that had to be sent to the binders

for repairs. The following table shows the number of volumes sent to the binders each month :

Aug. 29 to Sept. 24, 1905.....	441
Sept. 26 to Oct. 22.....	347
Oct. 24 to Nov. 26.....	407
Nov. 28 to Dec. 24.....	216
Dec. 26 to Jan. 28, 1905.....	293
Jan. 30 to Feb. 25.....	349
Feb. 27 to Mar. 25.....	388
Mar. 27 to April 22.....	316
April 24 to May 27.....	378
May 29 to June 24.....	504
June 26 to July 22.....	794
July 24 to Aug. 26.....	432
Total.....	4865

CIRCULATION.

The registration of readers during the past year has been as follows :

Officers of University, Professors and Instructors....	199
Students, College.....	850
Medical Department.....	246
Law.....	141
Dental.....	105
Veterinary.....	10
Fellows.....	25
Department of Philosophy.....	175
Teachers' Courses.....	71
	<hr/>
Special readers (including 46 students of the Protestant Episcopal Divinity School and of the Department of Theology of Ursinus College).....	92
Readers paying \$3.00 a year.....	25
Employees of the University.....	50
	<hr/>
	167
Total.....	1989

Of the total number of books, 62,651, given out during the past year, 9408 were used in the Library during the evening hours. It is gratifying to note that the number of students using the Library in the evening is increasing from

year to year, last year's attendance representing an increase of 35 per cent. over the previous year, and the circulation of books in the evening showing an increase of 21 per cent. over the year before. The wisdom of keeping the Library open up to a late hour has thus been fully justified.

The following figures furnish the statistics for the attendance of students in the reference room, but do not include those using the larger room where the current numbers of periodicals are kept:

Students using the Reference Room from 8.30 A. M. to 6 P. M.

Sept. 30 to Oct. 22, 1904	2751
Oct. 24 to Nov. 26	4658
Nov. 28 to Dec. 24	3851
Dec. 26 to Jan. 28, 1905	3531
Jan. 30 to Feb. 25	3332
Feb. 27 to March 25	3857
March 27 to April 22	3332
April 24 to May 27	4433
May 29 to June 17	624
Total	30,369

Students using the Library from 6 to 10 P. M.

Sept. 30 to Oct. 22, 1904	796
Oct. 24 to Nov. 26	1590
Nov. 28 to Dec. 24	1273
Dec. 26 to Jan. 28	1415
Jan. 30 to Feb. 25, 1905	1274
Feb. 27 to March 25	1438
March 27 to April 22	1286
April 24 to May 27	1795
May 29 to June 17	436
Total	11,303

The circulation of books by classes is furnished by the following statistics:

	Home use	Library use	Total
General Works	505	6,200	6,705
Philosophy	780	702	1,482
Religion	847	1,208	2,055
Sociology and Economics	3,758	9,704	13,462

	Home use	Library use	Total
Philology	748	593	1,341
Natural Sciences.....	1,338	3,815	5,153
Useful Arts.....	658	3,493	4,151
Medicine.....	356	792	1,148
Fine Arts.....	200	166	366
Literature.....	9,497	7,876	17,373
History.....	3,294	6,121	9,415
Totals.....	21,981	40,670	62,651

The circulation arranged by months was as follows :

Aug. 29 to Sept. 24, 1904.....	387	330	717
Sept. 26 to Oct. 22.....	1,593	2,703	4,296
Oct. 24 to Nov. 26.....	2,784	5,643	8,427
Nov. 28 to Dec. 24.....	2,308	4,598	6,906
Dec. 26 to Jan. 28, 1905.....	2,680	5,179	7,859
Jan. 30 to Feb. 25.....	2,349	4,441	6,790
Feb. 27 to March 25.....	2,381	4,867	7,248
March 27 to April 22.....	2,292	4,772	7,064
April 24 to May 27.....	2,528	5,613	8,141
May 29 to June 24.....	1,091	1,071	2,162
June 26 to July 22.....	719	637	1,356
July 24 to Aug. 26.....	869	816	1,685
Totals.....	21,981	40,670	62,651

As in former years, we have been in a position to loan books to a large number of institutions, and in return have received like courtesies from sister institutions. We are under especial obligations to Harvard University, the Library Company of Philadelphia, and to Columbia University, that have invariably responded to our requests for the loan of books which were not to be found on our shelves.

The examination of books in the stack has proceeded regularly during the year, and I am happy to report that the losses are exceedingly few. On the other hand, we have lost, as in former years, quite a number of books from the alcoves in the inner reading room, and it is much to be deplored that there should be among the students some who are not restrained from appropriating University property made accessible for the benefit of their fellow-students.

SEMINAR AND DEPARTMENTAL LIBRARIES.

The total number of volumes now deposited in the seminar and departmental libraries is 28,890, of which number 12,638 are in the upper floors of the Library building, and 16,252 distributed in the various departmental buildings.

I cannot close this report without referring to the loss that the Library has sustained in the retirement of Mr. W. W. Frazier from the Chairmanship of the Library Committee. During the ten years of his incumbency of that office, he devoted himself with whole-souled energy to the upbuilding of the Library. With his co-operation, the improved methods of modern Library economy were introduced in the management of its affairs. His generous aid made it possible to undertake the extensive task of recataloguing the entire collection of books, the result of which has been to produce a card catalogue that meets the highest standard required in a university library. A reading room with a capacity for 20,000 reference volumes has been fitted up, additional shelving for 30,000 volumes in the book-stack provided, and constant and extensive additions to the collections were made at his instance.

Besides his care for the Library, in which he was seconded by his associates on the Committee, he manifested a personal interest in the welfare of all engaged on the Library staff, so that through his retirement not only does the University lose a valued co-worker, but all at the Library a kind and honored friend. It is our earnest hope that the severance of official relations will not preclude his continuing to manifest an active interest in the development of the institution, to the advancement of which he contributed so largely through his time, his energies and his means.

I have the honor to be, Sir,

Obediently yours,

MORRIS JASTROW, JR.,
Librarian.

APPENDIX IX.

REPORT OF THE DIRECTOR OF THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY.

To the Provost of the University :

SIR : I present herewith a report upon the growth of the Wistar Institute of Anatomy and Biology and the activities therein during the year ending August 31, 1905.

With regret I record the resignation, on December 10, 1904, of Dr. Horace Jayne as Director of the Institute.

Dr. Jayne's long and conscientious service as Director is marked by many important steps in the development of the Institute. The beginning of an Institute Library by gift of several hundred volumes of valuable scientific books, and the increase of the museum collections by purchase from his own funds, are incidents which showed his devotion to the Institute and to his science. Dr. Jayne left to his successor a foundation well equipped with the results of years of careful work, and with plans matured upon which to build the future.

On January 11, 1905, Dr. Milton J. Greenman was elected to succeed Dr. Jayne as Director of the Institute.

With a view to the more successful achievement of the main object of the Institute, a conference of ten leading American anatomists was called to meet at the Institute, on April 11 and 12, and consider its future development and its relation to similar institutions, and especially to the investigators in anatomy. This conference, through its committee, made the following recommendations, which were presented to the Institute :

1. The principal object of the Institute to be research.

This would involve :

- (a) the appointment of a chief of investigation in one or more fields ;
 - (b) the appointment of research assistants, as well as men who shall divide their services between the museum proper and research ;
 - (c) the appointment of technical assistants.
2. Research. The research shall be :
- (a) In the field of neurology,
 - (b) comparative anatomy and embryology.
3. Relations. The committee recommends :
- (a) that a subvention to the Journal of Anatomy be granted ;
 - (b) that a committee be appointed to consider the relations of the Wistar Institute to American anatomists ;
 - (c) that the Wistar Institute apply to the Association of American Anatomists for co-operation.
4. The committee recommends that an Advisory Board of ten be appointed for general purposes :
- (a) to form a sub-committee on neurology, as well as other sub-committees that may be needed ;
 - (b) to establish relations with the committee of the International Association of Academies for Brain Investigation, and with other committees for collective investigation.
5. The committee would further state that while the general trend of work above outlined is recommended for the present, there is no intention to advise a limitation of the activities of the Institute to it exclusively.

In carrying out the general policy proposed at this conference, the Wistar Institute created an Advisory Board of Anatomists, and elected the following anatomists as members :

Dr. Lewellys F. Barker, Professor of Medicine, Johns Hopkins University, Baltimore, Md.

Dr. Edwin G. Conklin, Professor of Zoölogy, University of Pennsylvania, Philadelphia, Pa.

Dr. Henry H. Donaldson, Professor of Neurology, University of Chicago, Chicago, Ill.

Mr. Simon H. Gage, Professor of Histology and Embryology, Cornell University, Ithaca, N. Y.

Dr. G. Carl Huber, Professor of Histology and Embryology, University of Michigan, Ann Arbor, Mich.

Dr. George S. Huntington, Professor of Anatomy, Columbia University, New York, N. Y.

Dr. Franklin P. Mall, Professor of Anatomy, Johns Hopkins University, Baltimore, Md.

Dr. J. Playfair McMurrich, Professor of Anatomy, University of Michigan, Ann Arbor, Mich.

Dr. Charles S. Minot, Professor of Histology and Human Embryology, Harvard Medical School, Boston, Mass.

Dr. George A. Piersol, Professor of Anatomy, University of Pennsylvania, Philadelphia, Pa.

The Advisory Board organized by electing Dr. Charles S. Minot chairman, and Dr. Milton J. Greenman permanent secretary. It then proceeded to appoint the following committees :

- (1) On Neurology and the Establishment of Relations with the International Association of Academies, Dr. Lewellys F. Barker, Dr. Henry H. Donaldson, Dr. Franklin P. Mall, Dr. J. Playfair McMurrich, Dr. Charles S. Minot. This committee to elect its own chairman.
- (2) On Relations of the Wistar Institute to American Anatomists, Professor Simon H. Gage, chairman ; Dr. George A. Piersol, Dr. G. Carl Huber.
- (3) On Comparative Anatomy and Embryology, Dr. George S. Huntington, chairman ; Dr. Edwin G. Conklin, Dr. Franklin P. Mall.

I present the foregoing report of this conference in detail, since it promises to be a most important factor in the development of the Institute, and it is with great satisfaction that I record the entire approval of this action by General Wistar, the donor.

Through the assistance of the Advisory Board, the interests of American anatomy are being co-ordinated, and it is hoped that this Institute may become an important central institute for investigators in this department of science.

The recommendations of the Advisory Board are being carried out as rapidly as is consistent with proper manipulation of details and as the available income will permit. I am pleased to report in this connection the acquisition of Dr. Henry H. Donaldson as Professor of Neurology. Dr. Donaldson comes to the Institute in the interests of neurology, and with a sense of responsibility to the Advisory Board, who recommended him. He was selected as the proper person to lead American research in Neurology, and will assume charge of this department of the work of the Institute on October 1, 1905. Other appointments to the neurological staff are now pending.

The Committee on the Relations of the Wistar Institute to American Anatomists has been active, and early in September will issue a circular letter addressed to the anatomists of the country, inviting their co-operation and extending to them the privileges of the Institute.

The Committee on Neurology and the establishment of relations with the Committee of the International Association of Academies for Brain Investigation has established the desired relations, and three members of our Advisory Board are now members of the Central Committee of the International Association of Academies. They are Doctors Donaldson, Mall and Minot.

**Professor of
Neurology**

**Committees
of Advisory
Board**

The building of a research museum, such as the Wistar Institute is intended to be, depends upon the investigators working therein. There can be no museum without research, and there can be no research without a museum. They are interdependent. Our efforts during the past year have been devoted in part to the collection of such materials or specimens as are useful in the research work of the laboratories. From the laboratories have come many specimens which have served their purpose for present researches, and are now stored in the museum to serve some future investigation. A typical illustration of this we have in the series of sections of embryos permanently mounted upon glass slips, prepared with great care and labor, which having been used to show the development of some organ or tissue, are equally valuable to show many other structures. Of this class of material we have added to the museum collection thirty-four series of embryos, comprising 434 slides. Forty-four stages of developing shad were collected at the Torresdale Fish Hatchery, and most carefully prepared by Dr. H. D. Senior, for his work on this form, while an equal number of stages of the cod and flatfish were collected at the Woods Hole Station of the United States Bureau of Fisheries. I wish here to express my gratitude to the Commissioner of the Bureau of Fisheries for the privileges granted us in making these collections. By courtesy of Armour & Co., Dr. J. M. Stotsenburg was able to make a most complete collection of pig embryos from the abattoir in Chicago. These embryos are most skillfully prepared and will supply our laboratories for a long time to come.

A large number of specimens of traumatic dislocation of the femur and fracture of the bones of the leg and thigh have been collected during the year. These specimens are of interest from a surgical standpoint, and will be of much greater

interest later, when the results of some researches in the mechanics of fracture and dislocation, now being prosecuted in the laboratory, have been published.

There have been registered, in the museum catalogue, 283 accessions, representing more than five thousand specimens. Most important of these may be mentioned the race skeletons, including seven Chinese, one Sandwich Islander, and one Filipino, a skeleton of the Bison and a series of human infant brains.

Nine loans of specimens have been made from the museum, comprising thirty-six specimens. Twelve of these were loaned for lecture purposes, while twenty-four specimens were sent out to other laboratories, including University of Michigan, Smith College, and University of Leipzig for research purposes.

**Loans of
Specimens**

Considerable use has been made of the museum collections by authors who sought material for illustrative purposes on the subject of which they were writing.

Although no accurate record has been kept, it is very evident that the number of visitors to the museum has been increased to a marked degree during the past year.

To the equipment of the museum we have added six more standard free standing museum cases, and one "A" case, all made under our supervision in our own shop.

The increase of work in the laboratories has necessitated large expenditures in equipment. During the early part of the year our attention was devoted to the proper equipment for the preparation of fresh anatomical material and its dissection, under fluid for museum purposes. A metal topped table, with central sink, and a compressed air apparatus, operated by a water pump, in the basement, were installed. New dust-proof closets and lockers, and a large steel framed

**Laboratories
Equipment**

stack for shelving, were erected in the Neurological Laboratory, thus affording the much needed storage space for instruments and specimens. Two microscopes, two microtomes and a paraffine oven, with all their many accessories, have been added to the equipment.

A wall table of wood and iron has been erected around three sides of the neurological laboratory, affording ample facilities for five workers in well lighted space.

The preparation of museum specimens and research materials has been actively carried on by two Junior Associates in Anatomy and one technical assistant.

Laboratory Work I am pleased to report that the elaborate osteological preparations of the bones of the human skull which have been so extensively used by students in the museum, are nearly completed. While this series has been most attractive to medical students and others, I am inclined to think that in the future we can devote our energies to better advantage to a higher grade of anatomical work.

During the year there have been published two papers by Mr. Henry W. Fowler, of the Academy of Natural Sciences, upon the fishes of our collection, with the result that fourteen new species and two new genera have been described, and one paper on the Lymph Drainage of the Human Tonsil, by Dr. Geo. B. Wood, has come from our laboratory.

The work on the Mechanics of Dislocation of the Hip Joint which is being carried on by Dr. Oscar H. Allis is nearing completion and promises to be one of the most remarkable works of its class.

Special Research The library has been increased by the addition of seventy-four new volumes, of which twenty-eight were gifts from Dr. George A. Dorsey, Professor Simon H. Gage, Dr. Horace Jayne, Dr. S. Weir Mitchell, Dr. J. M.

Stotsenburg, University of Chicago Press, General I. J. Wistar and the United States Government. The regular subscriptions to forty-two journals and **Library** eleven periodically appearing monographs have been continued. The periodicals have been bound and the pamphlets classified, placed in cases and properly arranged. The cataloguing has proceeded as time permitted, although there is much of this work yet to be done.

Work in the shop has been actively carried on by the usual number of men, but owing to the extra demands made upon it to supply apparatus for the laboratories and library, it is much behind with its work. I **Shop** wish here to speak of the increasing satisfaction **Work** which our little machine shop has given to us in the production of special apparatus and museum equipment, and of the economical consideration in repairs to steam heating and electric lighting apparatus, and to plumbing about the building.

During the year no inconsiderable amount of money has been expended to keep the building in perfect repair. Some furniture has been added and **Repairs** preparations are now being made to receive **Alterations** the new accessions to our scientific staff, who are expected at the beginning of the new year.

Respectfully submitted,

MILTON J. GREENMAN,
Director.

APPENDIX X.

DEPARTMENT OF ARCHÆOLOGY.

To the Provost of the University of Pennsylvania :

SIR : During the year ending August 31 last the Department of Archæology has continued its work on lines laid down during its early history. The year has been eventful, and despite some drawbacks, has been one of considerable advance.

The Free Museum of Science and Art, where its home work is done, and in which its collections are housed, has been open to visitors daily during the College year. The number of visitors during the year was 38,684, being 6740 more than the previous year.

The lecture course was continued during the winter, the Archæological Institute giving its welcome co-operation as heretofore.

The Board of Managers gave the use of the building for other than its own purposes during the year as follows : October 28, 1904, for a reception to first year classes of the University given by the Provost and Mrs Harrison. December 28-31, for meetings of the American Association for the Advancement of Science, including a reception on the evening of December 28, to members of the Association by the Provost and Mrs. Harrison. January 28, 1905, for a meeting in the afternoon of the Delaware Valley Naturalists' Union, and lecture in the evening. Faculty Teas were held on February 22, and May 6. On the latter date there occurred the formal opening of the Wanamaker bronze collection, replicas from Herculaneum and Pompeii, with lecture by

Dr. Bates. April 13 for a reception of the American Philosophical Society. May 25, for a lecture by Dr. Clay to the students and Professors of the Lutheran Theological Seminary. The Museum was also open three evening for visits of the Summer School students of the University, on July 14, 21, and 28. On each of these occasions Professor Hugh A. Clark delivered a lecture on Musical Instruments, illustrating his talks with instruments from the Frishmuth collection in the Museum.

The Board of the Department would like to call the particular attention of the University, and of learned societies, to the desirability of the Museum as a place for holding receptions and meetings: the Board being glad to give the use of the Museum for such purposes for the very small cost of the wages of the employes and of the coal and light used.

During the year the second number of the Transactions was issued. Reference to other publications of the Department is made in the accompanying Reports of the several Sections.

During the spring a second Prize Essay contest was held, open to the students in the higher grades in the City Grammar Schools, and to all in the High, Normal, and Manual Training Schools; Dr. Brumbaugh and Dr. Talcott Williams having the competition in charge. To them and to the other members of the Committee, as well as to the donors of the prizes, the Department wishes to express its thanks for enabling it to bring itself more closely in touch with the scholastic life of the City. Competitive drawing was this year added to the contest. The ability shown in the drawings, as well as in the essays, speaks highly for the quality of teaching in our schools.

During the year the by-laws were altered, arranging the Board of Managers into four classes of four persons each, the term of office of but one class expiring each year. Four persons will, therefore, hereafter be nominated annually by the

members of the Department to the Trustees of the University.

At the January meeting of the Board the Hon. John Wanamaker was elected to fill the vacancy in the list of Vice-Presidents, caused by the death of Professor Maxwell Sommerville. Professor Sommerville's death, and his benefactions to the Department were noted in the last Report of the Provost. During the coming year the Department will receive the first payments of income from his two bequests, first for the general expenses of the Department, and second for the maintenance and care of his collections.

Dr. Hermann Ranke, Assistant Curator of the Egyptian Section, was, during the spring, offered a position in Egyptology under Professor A. Erman in the Royal Museum, Berlin. Dr. Ranke felt that the offer could not be refused, he, therefore, returned to Germany in June.

Clarence S. Fisher, the architect of the last expedition to Nippur, has continued in the employ, first of the Babylonian Committee, and later of the Department, completing his notes, drawings and models which had been begun in the field. Having now finished this work he left the service of the Department during June last.

Dr. Bates, Assistant Professor of Greek in the University of Pennsylvania, and Curator of the Mediterranean Section of the Department, in the spring secured leave of absence for one year, in order to avail himself of the offer of the Chair of Greek in the American School of Classical Study in Athens. On his arrival in Athens he found the Director of the School on his deathbed. Dr. Bates was almost immediately made Director of the School for this year—a position he will fill with great credit, and doubtless much benefit to himself and to the Department.

Mr. Francis P. Sibley, the Treasurer of the Department as well as of the University of Pennsylvania, after a long and trying illness, was compelled to resign both posts as Treas-

urer on May 19. It was with great regret that we were compelled to sever this connection, and it is with greater regret that we have to note Mr. Sibley's death on July 2.

At the end of February the Department suffered great loss by the resignations of Mrs. Cornelius Stevenson, President of the Department, and Curator of the Egyptian Section; Mr. Samuel T. Bodine, Vice President; Dr. W. H. Furness 3d, Secretary, and Curator of the General Ethnology Section; and Messrs. Calvin Wells and Justus C. Strawbridge of the Board of Managers. Some weeks later Mr. C. Hartman Kuhn resigned from the Board, and Mrs. John Harrison and Messrs. Thomas S. Harrison and C. A. Brinley from the Board of Advisory Managers. The services of each of these to the Department (particularly of the officers and members of the Board of Managers) had been of the very greatest importance to the work of the Department. Mrs. Stevenson's association therewith being contemporaneous with the very life of the Department, her individuality having impressed itself upon its work during the many years of her Secretaryship, and latterly of her Presidency. Mr. Wells, Dr. Furness, Mr. Bodine, Mr. Kuhn, and Mr. Strawbridge had long served the Department, and had contributed most liberally, in time, money and collections, to its success.

Those who remain to carry on the work of the Department are most sensible of the loss the Department has sustained. Fortunately, each of our former colleagues has expressed his or her willingness to help the Department by advising with the Board when requested.

No attempt was made during the Departmental year (ending August 31) to fill the vacancies caused by these resignations but at the date of the writing of this Report it is with pleasure that the Board reports that the vacancies have been filled as follows: Mr. B. Franklin Pepper, Mr. Edward Brinton Smith, Mr. James Hay, Dr. Norton Downs, Mr. Jacob S. Disston. Mr. Pepper was also elected Secretary; Mr. Eckley B. Coxe, Jr., Vice President; Dr. Gordon, Curator of the Gen-

eral Ethnology Section, and Dr. Bates of the Mediterranean Section.

In the Egyptian Section the work of accessioning the specimens has been continued, and the mastaba of Ra-ka-pu which was presented to the Museum by the Honorable John Wanamaker, has been erected in a room in the basement of the building and is now open to the public. The granite sarcophagus, also presented by Mr. Wanamaker, while not belonging to the mastaba, has been placed in the room, owing to the lack of space for displaying it elsewhere.

Mr. Eckley B. Coxe, Jr., again generously subscribed to the work of the Egypt Exploration Fund, and as a consequence the Museum has been enriched by a collection of over one hundred specimens from Ehnasya, Sedment, Deir el Bahari and Oxyrhynchus, including portions of wax tablets which show traces of writing, sandals, dice, reed pens, wooden combs, alabaster vases and a large limestone slab of an early king, probably of the VIth Dynasty.

The Section is indebted to the generosity of the American Exploration Society for a fine gold octodrachm of Arsinoë, two gold solidii of Valentinian and a turquoise in gold setting, the latter probably of the XVIIIth Dyn. These specimens were all found at Ehnasya, Egypt.

Mrs. Cornelius Stevenson has presented to the Department her collection of scarabs, amulets and textiles which had been deposited in the Museum.

Miss Boyd reports that in the preparation of the illustrated article which will be published at an early date on the excavations of the American Exploration Society in Gournia and Vasiliki, Crete, that from April 18 to August 3 last she was in Crete, devoting all her time to the preparation of plans and drawings, a complete catalogue of the Gournia findings in the Candia Museum, and detailed description of the site. From four to five weeks of this time was spent in Gournia itself, the rest in Candia. Mr. W. Sejk, an architect whose work for Dr. Doerpfeld at Troy, for the German excavations at Per-

gamon, and for the British School in Laconia, in sixteen days of very hard work measured the site at Gournia and Vasiliki, and on his return to Athens devoted a month to preparing a plan of the entire town of Gournia and sections of two important houses, also a plan and section of the excavations at Vasiliki. Mr. Helvor Bagge, who previously prepared excellent water-color drawings of some of the Gournia pottery, made three more such drawings, full size and full color, and by another process has copied some five hundred objects for illustration. While this work was going on in Crete a small insurrection was under way on the island. This added an element of uncertainty, though fortunately, there was no actual danger to life.

The Board takes pleasure in transmitting herewith the account of the work in the other Sections of the Department in a Report from each Curator.

The Board reports that all employes of the Department, in whatever capacity, have during the past year, done their work with great faithfulness and earnestness of purpose.

The Museum building is in a very good condition, the regular force of employes having made minor repairs and having done some painting during the summer.

The publications of the Department have been placed in the Museum for sale, and arrangements are now being made to have photographs of the more important specimens in the collections also placed on sale.

Respectfully submitted,

S. F. HOUSTON

Acting President.

To the Acting President :

SIR: The work of labelling and cataloguing ethnological collections, referred to in the report for last year was continued during last winter and spring. Measures were also

adopted for the greater security and more effective preservation of these collections.

From information gathered from various sources I learned during last winter that the Indian tribes of Alaska are rapidly changing their habits of life and showing a tendency to die out under the influence of the white intruders who have recently begun to penetrate that territory in considerable numbers. In order therefore to be in advance of this movement, I was enabled by the Acting President to spend the summer in Alaska collecting specimens and other data of scientific value for the Museum. My investigations were directed especially to the tribes occupying the unfrequented and unexplored parts of the interior and of the Bering Sea Coast. As a result of the summer's work the Museum has received a large collection representing the three typical culture areas of Alaska and containing many very rare specimens and others that are quite unique. A large number of photographs and other ethnological data of great interest were obtained for the Museum by this timely expedition. During my summer's travels I was constantly reminded of the urgent necessity for immediate measures for making further collections among the surviving tribes in North America. The material which would give a proper knowledge of the American Indian is becoming scarcer every year and the time is very near when such materials will be no longer available in any form. Our knowledge of many of the existing tribes is very meagre and the collections in the Museum are still far from adequate to represent the several types of aboriginal culture on our continent. While on the Pacific Coast I visited the Lewis and Clark exposition and purchased several collections for the Museum. Apart from these accessions, the following purchases have been made since September 1st, 1904: A collection made among the tribes of the Congo Basin by the Reverend Dr. Leslie; a collection of ivories from Point Barrow; a collection of southwestern Indian basketry and textiles and a collection of Indian basketry from Louisiana.

Count Tereshima of Tokyo, Japan, has presented, through the Provost, a model of Japanese armour. Mrs. William Frishmuth has added fifty specimens to the collection of musical instruments which bears her name. Gifts have been received from Miss Helen Landell, Dr. H. C. Shurtleff, Dr. C. S. Potts, and Miss Florence Keen.

As librarian of the Museum I have the pleasure to report that during the year the library has received 155 exchanges, and as a gift from Mrs. Cornelius Stevenson a collection of 1583 books and pamphlets relating chiefly to Egyptian archæology.

Respectfully,
G. B. GORDON.

To SAMUEL F. HOUSTON ESQ.,

Acting President of the Department of Archæology.

DEAR SIR: I have the honor to submit the following brief report on the work of the Babylonian and General Semitic Section during the past year.

The Curator assisted by his associates devoted considerable time to the examination of the large number of cuneiform tablets and other antiquities stored in the basement of the Museum, and to the plan of rearranging the show cases preparatory to the issue of a guide through the collections. Nearly 3000 antiquities were catalogued and a number of objects placed on exhibition, including two new types of terra-cotta sarcophagi from Nippur and a small but representative collection of pre-Sargonic bronze and stone objects from Fâra, the probable site of the Babylonian city of Shuripak, previously presented to the Museum by Mrs. I. C. Hilprecht.

At the same time the preparation of new volumes of "The Babylonian Expedition of the University of Penn-

sylvania," published through the generosity of Mr. Eckley Brinton Coxe, Jr., was carried on vigorously. In the early spring Dr. Herman Ranke, until Jan. 1, 1905, Harrison Research Fellow in Assyriology, issued his "Early Babylonian Proper Names" (Series D, Vol. III of the whole work). Four other volumes are ready for the press, viz., "Tablets dated in the Reign of the Rulers of the First Dynasty of Babylon," by Herman Ranke (Series A, Vol. VI, Part 1.); "Exercises and Copies from the Temple School at Nippur," by H. V. Hilprecht (Series A, Vol. XIII, Part 1.); "Mathematical, Metrological and Chronological Tablets from the Temple Library at Nippur," by H. V. Hilprecht (Series A, Vol. XIV, Part 1); "Administrative Archives from the Temple Library of Nippur at the Time of the Cassite Rulers" (with incomplete dates), by A. T. Clay (Series A, Vol. XXII). Besides, the preparation of the manuscript of four other volumes of Series A and Series D, by H. V. Hilprecht, A. T. Clay, and W. J. Hinke is far enough advanced to assure their publication in the near future.

"A Topographical Map from Nippur," was discussed in the "Transactions of the Department of Archæology" (Vol. 1, Part III, pp. 223-225), by Dr. Clay, who at the same time endeavored to advance the usefulness of the Department by a series of well attended public lectures.

In the interest of his researches on the unbaked and unfortunately much mutilated tablets from the Temple Library of Nippur, the Curator left on May 1, for the Imperial Ottoman Museum in Constantinople, where he remained till nearly the end of June, again most cordially supported in his work by His Excellency Hamdy Bey, Director General of the Museum, and becoming the recipient of extraordinary favors on the part of His Imperial Majesty the Sultan and his Government, for which he acknowledges his warm gratitude.

It is especially gratifying to refer to the remarkable development of the work of photographing and casting in charge of Mr. Witte. At times the applications for photographs, casts

and lantern slides became so numerous that the work of repairing the large number of antiquities from Nippur not yet catalogued had to be postponed.

Respectfully,

H. V. HILPRECHT,

Curator.

To the Acting President:

SIR: The Curator begs to make the following report or the year ending August 31st, 1905.

The most important work accomplished in the Section during the past year has been the putting in place of the Wanamaker collection of reproductions of the bronzes in the Naples Museum. This collection has been set up in Pepper Hall and in the two alcoves adjoining in the east wing. A few objects have not been exhibited for lack of space, but nearly the whole collection is now open to the public. The value of this collection for students of ancient art and of private antiquities is great, and its presence in the Museum adds much to the beauty of this Section. On the occasion of the opening of the collection the Ladies of the Faculties of the University gave a tea and the Curator lectured on the bronzes.

In addition the valuable Greek marbles presented to the Museum by Mrs. Lucy Wharton Drexel which were reported last year have also been put upon exhibition.

Unfortunately the installation of these new exhibits has reduced the space formerly given to Greek and Etruscan vases, the collection of Greek vases although small is very valuable and should be better exhibited.

Dr. Henry C. Shurtleff has presented specimens from the Temple of Diana at Ephesus and from Pompeii.

During the past year the Curator has continued his work on the material in the Section and has published a paper in the "Transactions" on the Etruscan inscriptions in the Museum.

Many of these inscriptions were previously unpublished, or incorrectly published, although they are important for students of Etruscan.

Interesting papers were contributed by Miss Harriet A. Boyd and Miss Edith H. Hall on their work at Gournia, and by Mr. Richard B. Seager on his excavations at Vasiliki, and Dr. Alfred Emerson contributed an article on the Torso of a Hermes in the Drexel Collection of Greek and Roman statuary.

This year the subjects for the prize compositions offered by the Museum to school children were both chosen from this Section.

It is hoped that the friends of this Section of the Museum may continue their interest so as to increase its collections, especially in the field of Greek vases.

WILLIAM N. BATES.

APPENDIX XI.

REPORT OF THE PRESIDENT OF THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA. FOR THE YEAR 1905.

To the Provost of the University :

The year 1905 may be characterized as one of prosperity and progress to our Hospital.

We are pleased to state that the Laundry and Isolation Buildings commenced last year are now completed and in active use. We believe we have one of the most thoroughly equipped Hospital Laundries in the State; and where formerly a large portion of our laundry work had to be sent outside, with our new laundry we are now able to do all the work much more effectively.

The Isolation Building is entirely completed and ready for any infectious case that may occur in the main Hospital. We believe this will be a great protection to the other patients as well as enabling us to more thoroughly protect the infected patient who heretofore had to be sent to the Municipal Hospital.

Three Sun Parlors have been erected to the wards in the Gibson Wing. Every ward now has a sun parlor and any one who visits the Hospital can readily see the comfort and pleasure the sick and suffering obtain from these sun parlors.

Two new suites for private patients have been provided, thus increasing our accommodations for that class of persons. It is specially noticed that the demand for private rooms is

increasing every year and our rooms are constantly occupied, with many waiting for them to be vacated. It is becoming very evident that the public feel that at a well conducted Hospital, better service and attention can be obtained than in their own homes.

We have also removed our ambulance stable from the Hospital grounds and have fitted up a building for that purpose in the neighborhood, which with telephone connection, enables us to do as effective service as heretofore,

The management is under obligations to Drs. deSchweinitz and Frazier for the furnishing of the Eye and Surgical Dispensaries, respectively, and we feel confident their generosity will result in a much more efficient and satisfactory Dispensary service.

During the year, the Hospital received \$10,191.60 for an endowed bed in a private room to be named the "Maxwell Sommerville Room," and \$5000 for an endowed bed in memory of "Richard Horner Wyeth." Tablets suitably inscribed have been prepared and placed in the corridor of the Hospital.

The number of Hospital days was 81,938. During the summer, two wards were closed owing to the building of the Sup Parlors, otherwise the number of days would have been greater. There were 3565 patients admitted, an increase of 117 over the previous year. The free patients numbered 2385, or almost two-thirds of the whole number admitted, again showing how large a portion of our service is free. The cost of maintaining the Hospital was \$191,837.81, a decrease of \$9564.31 in comparison to the year 1904. The indebtedness on August 31st, 1905, was \$13,009.21 against \$21,387.66 in August, 1904, showing a decrease of \$8378.45.

The Executive Committee have been untiring in their efforts during the past year to maintain the high standard of

the service. Our Superintendent, Miss Smith, and her assistants have shown the same careful attention to all their duties.

The thanks of the management are again due to the Board of Women Visitors for their many acts of generosity in the way of supplies to the different wards. To the Medical Staff as well as to those connected with the Dispensaries our thanks are again tendered.

JOHN SAILER,
President.

APPENDIX XII.

REPORT OF THE PUBLICATION COMMITTEE.

To the Provost of the University ;

SIR : As a result, we believe, of our appeal through you to friends of the University for additional funds to prosecute our work, your Committee is enabled to report the issue of several monographs of importance as contributions to knowledge on behalf of the University since the year ending August 31, 1904. The titles thereof follow, along with the titles of those manuscripts ready for publication so soon as the necessary funds may be in hand.

TITLES ISSUED IN 1904-1905.

SERIES IN ASTRONOMY.

Results of Observations with the Zenith Telescope of the Flower Astronomical Observatory, from October 1, 1901, to December 18, 1903. By Charles L. Doolittle.

Measures of 900 Double and Multiple Stars made with the Eighteen-inch Refractor of the Flower Astronomical Observatory. By Eric Doolittle.

SERIES IN HISTORY.

The Suffrage Franchise in the Thirteen English Colonies in America. By Albert E. McKinley.

SERIES IN POLITICAL ECONOMY AND PUBLIC LAW.

The Organization of Ocean Commerce. By J. Russell Smith.

SERIES IN MATHEMATICS.

Groups of Order p^m which Contain Cyclic Subgroups of Order p^{m3} . By Lewis I. Neikirk.

CONTRIBUTIONS FROM THE BOTANICAL LABORATORY,
Eight Papers, with Plates. By O. P. Phillips, et al.

CONTRIBUTIONS FROM THE ZOÖLOGICAL LABORATORY.

(For the year 1904.)

Part. 1. Nine Separata.

Part. 2. Study of the Behavior of Lower Organisms.
By Herbert S. Jennings.

Memoir—The Organization and Cell-Lineage of the Ascidian Egg.

TITLES ACCEPTED AND AWAITING PUBLICATION :

SERIES IN PHILOLOGY AND LITERATURE.

George Chapman and "The Tragedie of Chabot Admirall of France." By Ezra Lehman. (In press.)

A Study of the Poetry of John Donne. By Martin G. Brumbaugh. (In preparation.)

SERIES IN PHILOSOPHY.

The Datum of Knowledge; *das Gegebene* in the Transition from Kant to Fichte. By William T. Paullin, Jr. (In preparation.)

SERIES IN ASTRONOMY.

(1) Description, and Determination of the Longitude, of the Flower Astronomical Observatory. By Charles L. Doolittle. (In preparation.)

In connection with the issue of these serial publications, the University maintains exchange relations with one hundred and seventy-two institutions of learning and scientific societies—a relationship which, we believe, is not without reciprocal profit to our correspondents, both here and abroad.

Your Committee has also published, under the University imprint, the usual "Proceedings of University Day" (February

22, 1905), and the "Proceedings of Commencement Day" (June 14, 1905).

In conclusion, your Committee again presents for your thoughtful consideration the great importance of making liberal provision for the timely publication of the results of research work done under the auspices of the University. And we feel that we cannot do better, in emphasizing this point, than by quoting the final paragraph of our last report to you on this same topic, as follows :

"There is probably no branch of University activity more important in its effect upon the standing of a University in the academic world than the continuous and systematic publication of original material through the issue of serial monographs. We therefore make an urgent appeal through you to those who may be disposed to aid in maintaining the University Publications to contribute liberally to their support, and thereby to further one of the highest aims of the University, which is to stimulate scholarly investigation and to diffuse and promote knowledge among men."

EXCHANGE BUREAU.

FOREIGN EXCHANGES.

- Aachen, Technische Hochschule, Preussen, Deutschland.
- Academie des Inscriptions et Belles Lettres, Institut de France, Paris, France.
- Amsterdam Bibliothèque de l'Université (pour la Société Mathématique), Holland.
- Amsterdam, Koninklijke Akademie van Wetenschappen, Nederland.
- Asiatic Society of Bengal, Calcutta, India.
- Basel, Universitäts-Bibliothek, Schweiz.
- Berlin, Akademie der Wissenschaften, Deutschland.
- Berlin, Koenigl. Museum für Naturkunde Zoologische Sammlung, Deutschland.
- Berlin, Universitäts-Bibliothek, Deutschland.
- Bern, Universitäts-Bibliothek, Schweiz.

Bernice Pauahi Bishop Museum, Honolulu, Hawaii.
Bonn, Universitäts-Bibliothek, Preussen, Deutschland.
Bordeaux, Société d'Economie Politique, France.
Braunschweig, Technische Hochschule, Deutschland.
Bremen, Komitee für die Bibliothek, Deutschland.
Breslau, Koenigliche Universitäts-Bibliothek, Deutschland.
Brünn, K. K. Technische Hochschule, Mähren, Oesterreich.
Bruxelles, Jardin Botanique de l'Etat, Belgique.
Cambridge Philosophical Society, England.
Cambridge University Library, England.
Canadian Institute, Toronto, Canada.
Ceylon, India ; Royal Botanic Gardens.
Chile, University of, Santiago, Chile.
Christiania, Sweden ; Botanic Garden.
Congo Museum, Bruxelles, Belgique.
Constantinople, Imperial Ottoman Museum, Turkey.
Darmstadt, Technische Hochschule, Hessen, Deutschland.
Dorpat, Imper. Universitat, Russia.
Dresden, Konigl. Botanischer Garten, Deutschland.
Dresden Technische Hochschule, Sachsen, Deutschland.
Ecole Pratique des Hautes Etudes, Paris, France.
Edinburgh, Royal Society of, Scotland.
Egyptian Government School of Medicine, Cairo, Egypt.
Erlangen, Koenigliche Universitäts-Bibliothek, Bayern, Deutschland.
Ethnological Survey for Philippine Islands, Manila, P. I.
Florence, R. Istituto Botanico di Firenze, Italia.
Freiburg, i. B., Universitäts-Bibliothek, Baden, Deutschland.
Geneve, Universite de Geneve, Suisse.
Genua, Reg. Universita degli Studi, Italia.
Giessen, Universitäts-Bibliothek, Deutschland.
Glasgow, Natural History Society of, Glasgow, Scotland.
Gottingen, Koenigliche Gesellschaft der Wissenschaften, Preussen, Deutschland.
Gottingen, Universitäts-Bibliothek, Preussen, Deutschland.
Greifswald, Universitäts-Bibliothek, Preussen, Deutschland.

- Halle, Universitäts-Bibliothek, Preussen, Deutschland.
Hanover, Technische Hochschule, Preussen, Deutschland.
Heidelberg, Universitäts-Bibliothek, Baden, Deutschland.
L'Institut Catholique de Paris, France.
Jamaica, Institute of, Kingston, W. I.
Jamaica, Public Gardens and Plantations, Kingston, W. I.
Japan, Department of Education, Tokyo, Japan.
Jena, Universitäts-Bibliothek, Sachsen-Weimar, Deutschland.
Karlsruhe, Technische Hochschule, Baden, Deutschland.
Kazan, l'Universite Imperial (de la Société Physics Mathématique), Russie.
Kiel, Koenigl. Universitäts-Bibliothek, Preussen, Deutschland.
Koenigsberg, Koenigl. Universitäts - Bibliothek, Preussen, Deutschland.
Leiden, Rijks Universiteit, Nederland.
Leipzig, Universitäts-Bibliothek, Sachsen, Deutschland.
Liège, l'Universite de, Liège, Belgique.
Linnean Society of New South Wales, Elizabeth Bay, Sydney, Australia.
London, Royal Society of, Burlington House, London, England.
Louvain, l'Université Catholique de, Belgique.
Lund, Kong. Universitet, Sverige.
McGill University Library, Montreal, Canada.
Manchester, University of, England.
Marburg, Universitäts-Bibliothek, Preussen, Deutschland.
Marine Biological Association, Plymouth, England.
Marseilles, France : Institut Colonial et du Jardin Botanique.
Moskau, Imper. Maskovskij Universitet, Russia.
Munchen, Technische Hochschule, Bayern, Deutschland.
Munster, Koenigl. Akademie-Bibliothek, Preussen, Deutschland.
Musée Social, Paris, France.
Nancy, Université de, France.
Naples, Reale Istituto D'Incoraggiamento di Napoli, Italia.
New South Wales Royal Society of, North Sydney, Australia.
Oxford University, Bodleian Library, England.

- Padua, Reg. Università degli Studi, Padua, Italia.
Palermo, Circolo Matematico di Palermo, Italia.
Palermo, R. Orto Botanico di Palermo, Italia.
Perugia, Reg. Università degli Studi, Perugia, Italia.
Philippine Museum, Manila, P. I.
Pisa, Reg. Università degli Studi, Pisa, Italia.
Prag, Deutsche Universität, Boehmen, Oesterreich.
Prince Edward Island, Legislative Library, Charlottetown,
P. E. I.
Rennes, l'Université de France.
Rome, R. Istituto e del R. Orto Botanico di Roma, Italia.
Royal Horticultural Society, London, England.
Royal Institution of Great Britain, London, England.
St. Andrew's University, Scotland.
St. Etienne Societe D'Agriculture, Departement de la Loire,
France.
St. Petersburg, Imper. Universitet, Russia.
Sapporo, Imperial College of Agriculture, Sapporo, Japan.
Sardinia, Le Matematiche Pure ed Applicate, Italia.
Société D'Agriculture, Departement de la Loire, Saint Etienne,
France.
Strassburg, Universitäts-Bibliothek, Strassburg, Elsass, Deutsch-
land.
Stuttgart, Technische Hochschule, Wurttemberg, Deutschland.
Sydney Observatory, New South Wales, Australia.
Toronto University Library, Toronto, Canada.
Tubingen, Koenigl. Universitäts - Bibliothek, Wurttemberg,
Deutschland.
Upsala, Kong. Universitets-Bibliotek, Upsala, Sverige.
Utrecht, Rijks Universiteit, Utrecht, Nederland.
Wien, K. K. Naturhistorisches Hofmuseum, Oesterreich-
Ungarn.
Wien, Technische Hochschule, Oesterreich-Ungarn.
Wien, K. K. Universitäts-Bibliothek, Oesterreich-Ungarn.
Wurzburg, K. K. Universität, Bayern, Deutschland.
Zurich, Switzerland ; Botanical Gardens.

DOMESTIC EXCHANGES.

- Academy of Natural Sciences, Philadelphia.
American Academy of Arts and Sciences, Boston, Mass.
American Catholic Historical Society, Philadelphia.
American Jewish Historical Society, Washington, D. C.
American Museum of Natural History, New York City.
American Philosophical Society, Philadelphia.
Ames Botanical Laboratory, North Easton, Mass.
Boston Public Library, Boston, Mass.
Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y.
Brown University, Anatomical Museum, Providence, R. I.
Buffalo Society of Natural Sciences, Buffalo, N. Y.
California Academy of Sciences, San Francisco, Cal.
California, University of, Berkeley, Cal.
Carnegie Institution, Washington, D. C.
Carnegie Library, Pittsburg, Pa.
Case Memorial Library, Hartford, Conn. (Hartford Theological Seminary.)
Catholic University, Washington, D. C.
Chicago Academy of Sciences, Lincoln Park, Chicago, Ill.
Chicago, University of, Chicago, Ill.
Cincinnati Society of Natural History, 312 Broadway, Cincinnati, O.
Cincinnati, University of, Cincinnati, O.
Colorado College Scientific Society, Colorado Springs, Colo.
Colorado University, Boulder, Colo.
Columbia University Library, New York City.
Congress, Library of, Washington, D. C.
Cornell University Library, Ithaca, N. Y.
Davenport Academy of Sciences, Iowa.
Denison University Library, Granville, Ohio.
Detroit Public Library, Mich.
Free Library of Philadelphia.
Harvard University Library, Cambridge, Mass.
Illinois, University of (State Laboratory of Natural History),
Urbana, Ill.

Iowa State Historical Society, Iowa City, Iowa.
Iowa, University of, Iowa City, Iowa.
John Crerar Library, The, Chicago, Ill.
Johns Hopkins University Library, The, Baltimore, Md.
Kansas Historical Society, Topeka, Kansas.
Kansas University, Lawrence, Kansas.
Leland Stanford, Jr., University Library, Palo Alto, Cal.
Lloyd Library, The, Cincinnati, Ohio.
Massachusetts Horticultural Society, Boston, Mass.
Massachusetts Institute of Technology, Boston, Mass.
Michigan, University of, Ann Arbor, Mich.
Missouri, University of, Columbia, Mo.
Montana, University of, Biological Station, Missoula, Montana.
Nebraska, University of, Lincoln, Nebraska.
New York Botanical Garden, New York City.
New York Public Library, New York City.
New York, University of State of, State Library, Albany, N. Y.
Northern Indiana Historical Society, South Bend, Ind.
Oberlin College, Oberlin, Ohio.
Ohio State Arch. and Historical Society, Columbus, Ohio.
Peabody Museum, Harvard University, Cambridge, Mass.
Philadelphia, Library Company of, 1300 Locust Street, Philadelphia.
Princeton University Library, Princeton, N. J.
Radcliffe College, Cambridge, Mass.
Rush Medical College Library (University of Chicago), Chicago, Illinois.
Smithsonian Institution, Washington, D. C.
Texas Academy of Science, Austin, Texas.
Trinity College Historical Society, Durham, N. C.
United States Census Office Library, Washington, D. C.
Vermont, University of, Burlington, Vt.
Virginia Historical Society, Richmond, Virginia.
Wisconsin Natural History Society, Milwaukee, Wisconsin.
Wisconsin, University of, Madison, Wisconsin.
Yale University Library, New Haven, Conn.

Total receipts through Exchange Bureau :

3032 dissertations and official publications from foreign universities.

679 dissertations and official publications from United States universities.

323 publications from United States and foreign learned societies and from schools.

4034

196 periodicals.

Respectfully submitted,

EDWIN GRANT CONKLIN,

Chairman.

APPENDIX XIII.

REPORT OF THE GRADUATES' APPOINTMENT COMMITTEE.

To the Provost of the University :

DEAR SIR : I have the honor to transmit herewith a report of work done during the past year in connection with the appointment of members of the University to teaching positions :

There are registered on the Committee's books one hundred and fifty-three (153) applicants for teaching positions. Many of those registered are already teaching, but desire to better their positions. The Committee has received direct inquiries from forty-four (44) educational institutions looking towards filling vacancies, and in thirty-three (33) of these cases nominations have been made.

A list of schools, colleges, etc., to which appointments have been made during the past year is appended. In this list is included also a record of appointments secured through the recommendation of the heads of departments in the College.

Seventy-two (72) persons are registered with the Committee as applicants for tutoring work only.

Respectfully submitted,

EDGAR F. SMITH,

Chairman.

Illinois :

University of Illinois, Urbana..... 2

Maine :

University of Maine, Orono..... 1

Michigan :

University of Michigan, Ann Arbor 1

Missouri :

Central College, Fayette	1
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New York :

College of City of New York	1
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Vassar College, Poughkeepsie	1
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Pennsylvania :

Central High School, Philadelphia	1
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Chestnut Hill Academy, Chestnut Hill	1
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Yeates School, Lancaster	1
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Johnstown High School	1
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Northeast Manual Training School, Phila	2
---	---

Episcopal Academy, Philadelphia	1
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Friends' Select School	1
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Girls' High School, Philadelphia	5
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Miss Gordon's School for Girls, Phila	1
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Villa Nova College	1
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Allegheny College, Allegheny	1
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Lehigh University	1
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University of Pennsylvania	5
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South Carolina :

Woman's College, Columbia	1
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Virginia :

Ladies' Academy, Staunton	1
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Washington, D. C. :

Central High School	1
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Wisconsin :

University of Wisconsin, Madison	2
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Total	34
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APPENDIX XIV.

To the Provost of the University:

SIR: At a meeting of the Board of Trustees, held May 23, 1904, the following recommendations were approved:

1st: That the course in Physical Education be made an integral part of the University curriculum, and that the Gymnasium be under the control of the Trustees.

2nd: That the course in Physical Education shall be optional in the Department of Philosophy, the Gymnasium not being open to women.

3rd: That in the Professional Schools the course shall be optional except to students under 21 years of age, who, in the opinion of the Director stand in need thereof.

4th: That in the College, including students, in Arts, Science, and Wharton School, the course be obligatory upon all students under 21 years of age, and upon all over that age for whom the Director may consider it advisable.

This necessitated the complete reorganization and extension of the Department as then constituted, and the appointment of a Director. I have the honor of submitting to you the first annual report as Director of the Department under these revised regulations.

The fact that the system of physical education at Pennsylvania has been occasionally referred to as one of compulsory athletics, shows that the distinction between athletics and physical education is not clear to all minds; so that in this first report I feel that this difference should be defined, if the aims and scope of the work undertaken are to be thoroughly appreciated, and the principles for which it stands are to be clearly apprehended.

The education of the bodily activities is a mere incident in most athletic games—an important one it is true—but the

game is, or should be, a spontaneous expression of the play instinct of youth, rather than an educational scheme deliberately designed for his physical betterment.

The scheme of physical education at this University must be specially adapted to the conditions of the college student ; and the main requirements are for

(1) Increased respiratory power,

(2) Development of the neglected muscle groups of the arms, chest, and abdomen, and

(3) The training of neuro-muscular control, which is lamentably lacking in so many cases that present themselves for examination.

Games may be used to advantage in many of these cases, and others may have had a good start before they come to us. But for the great mass of men who enter in the first year it is necessary to begin with the simplest movements and exercises, going to more and more complicated work as progress warrants it. In this way the student receives in his four years' course a complete education of his strength, speed, agility, and endurance ; besides more than a bowing acquaintance with the elementary and fundamental movements of those games and sports like boxing, fencing, wrestling, and swimming, without which no man can be called educated in the highest sense.

The propriety of including physical education in a college course, and of requiring at least a minimum, with opportunities for much more, I need scarcely more than state at this time. The experience of other institutions in which regulated physical exercises have been required over a number of years of all students shows a consistent and marked decrease in the sick list from the freshman year to the time of graduation.

A thorough examination, with advice, at the beginning of a student's course, may mean the difference between continued disability or progressive failure in health, and a constant improvement in his physical condition. It is only by this means that he can be developed harmoniously into the

all round citizen,—no one part forced at the expense of another—the finished product; a man not only able to will and to plan but having acquired the vitality and physique to do and to execute.

The building that is dedicated to this work is entirely fire-proof in construction; the floors and columns being concrete. Both entrances lead to spacious vestibules, near which are the offices of the Athletic Association and those of the Director of the Department. From this point one passes to a gallery, overlooking the swimming pool on the ground floor, 100 feet long by 30 feet wide, containing nine feet of water at one end, and four feet six inches at the other.

At either end of the basement are team dressing rooms or football, track athletics, and baseball, etc., with adjoining shower bath room, tailor shop, drying room, and trainer's room. One wing is for visitors and guests, and the other for the Varsity team. On the same floor as the swimming pool, are rooms for boxing, fencing and rowing.

Passing up a broad flight of stairs, one will find himself upon a raised platform, commanding a view of Weightman Hall, 144 feet long by 70 feet wide; lighted not only by ample windows, but also by a roof of glass. It is here that the more serious work of physical education is done.

On this floor, in both wings, are the locker rooms, with originally 1500 in place, and a recent addition of 1000 more.

The committee, in deciding upon the plans, clung firmly to the idea that the building must be for the development of the health and strength of the student body as a whole, and that while special activities should be encouraged, they should be encouraged only as auxiliaries to this main purpose.

Before the formal opening, which took place on December 14th, 1904, the equipment of apparatus and furnishings had to be designed; but work was begun early in October, by the examination of the candidates for the football squad (65 in number) in the temporary wooden shed, since removed, that served as a dressing room for the teams. These were

recorded upon typewritten sheets until more suitable forms were determined upon. The designs and arrangement of apparatus for the main exercise hall, and the various smaller rooms had also to be made to fit our rather unusual conditions, and provide for the accommodation of 3000 students, and for five daily classes of 150 men each. This signified the employment of new methods for clearing the floor and setting up the various pieces of fixed apparatus, which has always been a difficult problem. It was accomplished by having the parallel bars, horses and bucks, set upon standards made to fit into sockets sunk in the concrete beneath the floor. In this way they are readily interchangeable, and when not in use they are stored upon trucks that occupy but little space. The horizontal bars, which are adjustable, are also fitted in floor sockets, and are readily hauled up to the iron girders of the roof; and thus the floor can be completely occupied by apparatus, or completely cleared for a large class in less than three minutes.

The examination of the general student body was begun in November and carried on almost continuously until spring. In this work I had the valued help of Mr. J. Leonard Mason, appointed instructor in gymnastics in October, 1904, and of Mr. Charles E. Suiter, who had been appointed assistant instructor at the same time, and who resigned last spring to accept the position of Director of Physical Education at Lehigh.

An analysis of the first 1000 men examined is of interest as showing the nature and extent of the defects most frequently found, and as a guide to the prescription of exercises to combat these conditions.

594 men presented marked defects of some kind, of which, 160 had uneven shoulders, the right shoulder being lower in all but twenty cases; while 84 showed well advanced lateral curvature of the spine. In 209 the chest was flattened, and the shoulders round, to the extent of making the carriage awkward, unsightly, and interfering with respiratory movement. These men were almost all capable of being straight-

ened and developed enormously by proper exercises. 217 men showed a breaking down of the arches of the foot, most of them capable of great improvement, with an increase in comfort and efficiency by the regulated exercises prescribed on cards sent to each one after the examination. These exercises were first given under the personal supervision of myself, Mr. Mason, or Mr. Suiter. Many of these men have shown marked improvement as a result of following out this work, and have reported their progress monthly.

Hernia was found unprotected by proper means, in 12 cases, and the change from an active to the comparatively sedentary student life showed, by derangement of the gastrointestinal functions, in 200 more.

These figures will serve to give an idea of the nature of the defects found, and do not include the number of men whose heart or lungs were not in condition to warrant their engaging in the more violent forms of athletic sports and games; and who were prevented from doing themselves permanent injury.

While these examinations were going on, voluntary classes were started on the gymnasium floor in Mr. Mason's charge as soon as the first of the apparatus was in place. These classes met daily until the regular work could be organized.

The Gymnasium was formally handed over by the Committee on December 14th, 1904, and formally accepted by the University. The presentation address was delivered by Professor J. William White, representing the Committee. It was reprinted in pamphlet form with the replies to it, and sent to all subscribers to the Fund.

A tentative start was made in February, 1905, by forming classes to include all from whom the regulations required a definite amount of exercise. The enrolment for regular gymnasium work showed nearly 600 names on the class lists; 184 excused as being on teams, and 77 excused on account of physical disability making a total of 861 men.

Owing to the lateness in the session and the inevitable

delays in designing the various forms and procedures necessary at the beginning of so great a scheme many men were excused from the rule, pending a revision of the regulations, which took place during the summer, and now reads :

"In the following cases a certain amount of gymnastic or athletic work will be required, for which the student will receive credit on the basis of laboratory work. In all other cases the work will be optional.

College and Wharton School.—Two periods will be required in The College and Wharton School, lasting one hour each, of all full students, and of partial and special students as provided by a special form ; the work to be graded and made progressive throughout the four years.

Exceptional cases to be excused from this requirement when approved jointly by the Director of the Department of Physical Education and the Dean of the Department.

Professional Schools.—The same amount of work will be required from members of the first and second years in the Department of Medicine, and from members of the first year in the Departments of Law, Dentistry, and Veterinary Medicine.

EXCEPTIONS.

First. All full students who have, in the opinion of the Director of the Department of Physical Education, had an equivalent amount of work at this, or another, University or College.

Second. Holders of a College degree in Arts or Science.

Third. Those having some physical disability.

Membership and regular attendance at practice of any of the athletic squads of the University will be taken as an equivalent for gymnasium work while the man is in active training, the attendance being reported weekly."

The classes were popular with those who took the work, from the start, and, in the spring, when the weather permitted of it, they were conducted on Franklin Field in the open air.

An examination for physical ability was made at the end

of the session, and it is to be hoped that some practical method will be designed to test progress in physical education that will correspond in some degree at least to the examinations of the more scholastic branches.

The installing and the testing of the apparatus continued during the summer, but was not completed until October, 1905, when it was finally accepted under guarantee.

In track and field athletics, Dr. Shell, Instructor in athletics, reported about 50 men in training for the various events, Franklin Field being used in fine weather, and the indoor track under the south stand during inclement weather.

The swimming pool was the first part of the Gymnasium that was ready for use. In October, 1904, Mr. George Kistler was appointed Instructor of swimming, with an assistant, and was placed in charge of the new pool. As each student came up for physical examination he was given a card which was presented to Mr. Kistler, who examined him as to his ability, and, when necessary, gave him instruction. Following is Mr. Kistler's report:

"Of 610 men who reported, 466 were found to have some knowledge of swimming, 144 could not swim at all. Of these 144 men 61 were taught to swim, and their cards returned properly certified. 83 failed to return their cards, of which, about one half have learned to swim, making a total of at least 100 who were taught to swim last year. It was found that it requires about six lessons to teach the average beginner to support himself, and make progress in the water unaided; and many more lessons to obtain any great degree of proficiency.

During the winter there were 9 meets, which included a lecture on methods of resuscitation of the exhausted or apparently drowned swimmer. In addition there was held for the first time here the Inter-Collegiate swimming Championships, and, in the spring, an Inter-Scholastic meet, in which were represented practically all the preparatory schools in this district. The pool has been an exceedingly popular

part of the Gymnasium equipment, and at times the daily average of bathers was over two hundred."

Although fencing was not a regular part of the course last year, space was provided for it in the Gymnasium, the work being ably conducted by Mr. Leonardo Terrone.

Professor Charles E. Dana kindly delivered a lecture on the "Evolution of the Sword" and "Sword Play," which were illustrated by examples from his collection. This was followed by an exhibition by members of the Fencing Club and visitors. It has been thought wise to introduce some of the elementary movements of fencing into the regular class work, and, to that end, Mr. Terrone has been appointed a regular Instructor of fencing to the University.

Boxing and Wrestling were under the control of the Boxing and Wrestling Club, for which was provided a room in the Gymnasium, but in future it will be taken over directly by the Department. The first Inter-Collegiate Wrestling championship meet was held in March.

The rowing room was fitted up with sixteen rowing machines, on which the Crew candidates did their indoor training, from January till March, under the direction of Mr. Ellis F. Ward. About 40 men were in training during this period.

Provision was also made for indoor baseball and lacrosse practice by a system of nets in Weightman Hall, but I would strongly urge the necessity of providing for these sports elsewhere, as the place is unsuitable, and it is inconvenient to keep the floor space free at the hours required.

So much of the health and comfort of the student's life depend upon the efficiency of his eyes, that it seems particularly important to find out their exact condition at the beginning of a four-year course, in which they will be under constant and oftentimes severe strain. It is more especially to errors of refraction that attention must be paid, for slight errors which are not to be distinguished by a superficial examination, may produce most distressing symptoms, if left uncorrected. This is particularly true of astigmatism and

hypermetropia, which does not appear, except by the most careful tests in addition to those used to detect myopia.

Dr. Posey, the ophthalmologist of the Department, conducted the examinations, assisted by ten qualified physicians from the various hospitals. Appointments were made in groups of fifty. If the vision was discovered to be fair or below normal in either eye; if headache or other symptoms of eye strain were complained of, an immediate test for glasses was advised. If the vision was noted to be slightly defective, re-examination was advised, but not until the holidays, when the college work is not so seriously interrupted. If the tests indicated normal vision and healthy eyes, the student was so advised and his ocular condition was pronounced satisfactory.

While I do not believe it is a function of the University, or of the Department, to prescribe glasses or other treatment, as a routine practice, I believe that it is our duty to put a man upon his guard, and explain to him the fact that a pair of glasses may be to him an important and increasingly valuable investment.

The statistics of the last two years' examinations are now being compiled, in preparation for a special report in which it is expected that important information will be obtained as to the frequency and progress of ocular defects among college students, with recommendations for proper treatment of these conditions.

In future reports, such questions as posture, and the examination of the heart, blood-pressure, etc., may be discussed more in detail. Although space will not permit me to enlarge upon their importance at present the Department of Physical Education must take them into consideration, since they have so direct an influence on the health, safety and efficiency of the student.

The whole is respectfully submitted.

R. TAIT MCKENZIE,
Professor of Physical Education and Director of the
Department.

APPENDIX XV.

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TREASURER'S REPORT.



For the Year Ending August 31, 1905.

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REPORT OF THE TREASURER OF THE UNIVERSITY OF PENNSYLVANIA.

GENERAL BALANCE SHEET.

Assets :

I. Real Estate.....	\$6,436,694	15	
II. Libraries, Museums, Apparatus, Furniture and Perpetual Insurance deposits	1,907,090	16	
III. Securities :			
Railroad and Corporation Bonds.....	\$2,897,466	38	
Stocks.....	459,273	33	
			3,356,739 71
IV. Mortgages :			
On property in Philadelphia and vicinity..	\$363,545	00	
On property in Chicago, etc.....	118,500	00	
			482,045 00
V. Ground Rents.....	57,153	95	
VI. Loans on Collateral.....	58,842	07	
			\$12,298,565 04
VII. Cash Balances in Various Trust Companies and Banks :			
To credit of Investment funds :			
University Trusts.....	\$50,565	02	
Building funds.....	57,729	77	
Hospital funds.....	24,220	65	
To credit of funds not for Investment :			
University.....	7,680	84	
Hospital.....	13,682	39	
To credit of Income :			
University	13,764	68	
To credit of Administration	72,202	15	
			239,845 50
			\$12,538,410 54

Liabilities :

Bonds Central Light and Heat Station	\$30,000 00	
Mortgage, No. 3451 Woodland Avenue.....	5,500 00	
Advances to Trusts by Administration.....	24,632 84	
Advances to Land purchases, Building funds, etc.....	34,209 23	
Loan to Veterinary Hospital.....	10,400 00	
		104,742 0
Excess of Assets.....		<u>\$12,433,668 4</u>

REAL ESTATE.
IN PHILADELPHIA.

IN FIFTH WARD.

Premises No. 224 Stampers Street	\$1,800 00
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IN SIXTH WARD.

Premises No. 58 North Fourth Street.....	20,000 00
" " 60 " " "	30,000 00
" " 62 " " "	18,800 00
" " 64 " " "	14,600 00
" " 66 " " "	20,000 00
" " 66 " " " (rear)	6,000 00
" " 29 and 31 North Seventh Street.....	20,980 00
" Bread and Quarry.....	1,000 00

IN TWENTY-SEVENTH WARD.

Plot of ground between Thirty-fourth and Thirty-sixth, Spruce and Woodland Avenue, with College Buildings and Medical Hall.....	643,799 27
Medical Laboratory.....	69,414 15
Plot of ground between Thirty-sixth, Spruce, Woodland Avenue, Woodland Cemetery and Guardian Street.....	250,000 00
Library Building	209,142 08
Biological Building.....	36,844 98
Plot of ground between Connecting Railway and Thirty-fourth Street.....	250,000 00
Plot of ground, Thirty-third and Marston Streets.....	12,764 46

Plot of ground between Thirty-sixth and Spruce, Woodland Avenue and Police Station.....	20,000 00
John Harrison Laboratory of Chemistry....	113,607 82
Henry Howard Houston Hall.....	134,544 57
Dormitory Building, first section.....	344,268 67
Dormitory Building and Memorial Tower, second section.....	242,048 01
Dormitory Building, third section.....	33,608 80
Dormitory Building, fourth section.....	1,085 62
Central Light and Heat Station.....	186,050 83
Department of Hygiene Building.....	50,000 00
Department of Hygiene Laboratory.....	15,001 75
Premises Nos. 3328, 3330, 3332, 3334, 3336, 3338 Walnut Street.....	37,000 00
Premises Nos. 3340, 3342, 3344, 3346, 3348 3350 Walnut Street.....	47,500 00
Premises No. 1021 Chestnut Street.....	44,000 00
" No. 1029 Chestnut Street.....	50,000 00
" Chestnut Street Opera House....	350,000 00
" No. 3451 Woodland Avenue.....	5,500 00
" " 4053 Spruce Street.....	6,500 00
" " 4057 Spruce Street.....	6,700 00
" " 4059 Spruce Street.....	7,000 00
" " 249 South Forty-first Street..	4,800 00
" Woodland Avenue, between Thirty-sixth and Thirty-seventh Streets.	30,000 00
Department of Dentistry Building.....	129,851 08
Dining Hall.....	14,799 58
Law School Building and Lot.....	432,187 38
Museum Science and Art.....	391,831 08
Randal Morgan Laboratory of Physics.....	76,885 90
Premises Thirty-third and Locust.....	29,125 00
New Medical Laboratory.....	622,894 08
New Engineering Department Building....	368,714 43
Plot of ground, Thirty-fourth to Thirty-fifth and Spruce to Pine.....	125,000 00
Hospital Buildings.....	243,743 92
Gibson Wing.....	65,000 00
Nurses' Home.....	20,000 00
Nurses' Home New Building.....	28,598 37
Mortuary Building.....	11,000 00
Maternity Building.....	29,000 00
Agnew Memorial Pavilion.....	166,645 57
Pepper Clinical Laboratory.....	50,000 00

James Dundas Clinic.....	6,098 67
Anna D. Scott Memorial.....	15,000 00
X-Ray plant.....	25,000 00
Sun Parlor.....	7,867 91
Isolation Ward.....	21,776 41
New Laundry.....	14,382 04

IN TWENTY-NINTH WARD.

Premises No. 3011 Girard Avenue.....	5,300 00
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IN THIRTY-NINTH WARD.

Twenty-three and one-half acres on Delaware River.....	100,000 00
Two and eighty-seven one-hundredths acres on Meadow Street.....	20,000 00

IN CHESTER COUNTY, PA.

Farm property, Glenloch, Chester Co.....	29,782 50
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IN DELAWARE COUNTY, PA.

Reese Wall Flower Observatory grounds..	15,821 84
“ “ “ Professor's residence..	11,808 25

IN ELK AND MCKEAN COUNTIES, PA.

About seven hundred acres.....	5,054 71
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IN SEA ISLE CITY, N. J.

Marine Biological Laboratory.....	3,700 00
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IN MANCHESTER, MASS.

Sundry lots of ground.....	15,463 42
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IN HOLLY BEACH, N. J.

Sundry lots of ground.....	1 00
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\$6,436,694

LIBRARIES, MUSEUMS, APPARATUS, FURNITURE, AND PERPETUAL INSURANCE.

College Apparatus and furniture.....	\$122,819 56
Department of Medicine Apparatus and furniture.....	101,560 42
Department of Law Apparatus and furniture.....	146,419 04
Department of Dentistry Apparatus and furniture.....	26,850 08
Department of Hygiene Apparatus and furniture.....	21,024 86
Department of Veterinary Medicine Apparatus and furniture.....	11,422 00
University Library—Books, etc., Apparatus and furniture.....	477,720 04
New Engineering Building Apparatus and furniture.....	27,011 58
Museum Science and Art Collections, Apparatus and furniture.....	690,000 00
New Medical Laboratories, Apparatus and furniture.....	63,208 37
Randal Morgan Laboratory of Physics, Apparatus and furniture.....	21,338 68
Wistar and Horner Museum, Collections and furniture.....	40,000 00
Towne fossils, collections and furniture....	5,011 13
Flower Observatory Apparatus and furniture.....	24,098 78
Hospital furniture.....	60,511 43
Houston Hall furniture.....	22,891 21
Dormitory furniture.....	12,944 38
Dining Hall furniture.....	1,200 00
Orthopaedic Machine Shop.....	2,000 00
X-Ray Apparatus.....	5,000 00
	<hr/>
	\$1,883,031 56
Perpetual Insurance on College Buildings..	\$10,089 00
On Veterinary Buildings.....	900 00
" Hospital Buildings.....	4,671 50
" Hospital Buildings, Gibson Wing ..	900 00
" Hospital Building, Nurses' Home..	900 00
" Biological Buildings.....	300 00
" Central Light and Heat Building...	1,000 00
" Department of Hygiene Building...	875 00
" Chemical Laboratory Building.....	1,200 00



Treasurer's Report.

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	Cost.
10,000 Connecticut Railway & Lighting Co. 1st Mtg. 4½'s, 1951	\$10,000 00
45,000 Chicago, Burlington & Quincy Railway, Illinois Division 3½'s, 1949.....	41,118 75
10,000 Chesapeake & Ohio Railway Car Trust 4's, 1913..	9,657 00
5,000 Choctaw, Oklahoma & Gulf R. R. Cons. Mtg. 5's, 1952	5,000 00
60,000 Denver & Rio Grande R. R. 1st Consol. Mtg. 4's, 1936.....	59,555 00
12,000 Elmira & Williamsport R. R. Co. Income Bonds 5's, 2862	12,000 00
30,000 Evansville & Terre Haute R. R. 1st Mtg. 5's, 1942	30,600 00
33,000 Erie R. R. prior lien 4's, 1996	48,082 50
93,000 Equitable Ill. Gas Light Co. 1st Mtg. 5's, 1928....	94,350 00
57,800 Electric & People's Traction Trust Certif. 4's, 1945	57,423 75
5,000 Fairmount Coal & Coke Co. 1st Mtg. 4's, 1919....	5,000 00
30,000 Hudson County Gas Co. 1st Mtg. 5's, 1949	30,000 00
50,000 International Nav. Co. 1st Mtg. 5's, 1929.....	50,000 00
15,000 Indianapolis Street Railway Co. Gen. Mtg. 4's, 1933	13,037 50
91,000 International Nickel Co. Sinking Fund 5's, 1932 ..	91,000 00
25,000 Indianapolis Traction & Tunnel Co. 1st Mtg. 5's, 1933	24,147 50
60,000 Jersey City, Hoboken & Paterson Street Railway 1st Mtg. 4's, 1949.....	50,000 00
25,000 Jersey City & Bergen Railway 1st Mtg. 4½'s, 1923	25,937 50
23,000 Kansas City, Mo., Gas Co. 1st Mtg. 5's, 1922.....	21,882 50
1,350 Lehigh Coal & Nav. Co. Cons. Loan 4½'s, 1914..	1,471 50
34,000 Lehigh Valley Coal Co. 1st Mtg. 5's, 1933.....	33,850 00
6,000 Lehigh Valley R. R. Car Trust 4½'s, 1910.....	6,120 00
25,000 Lehigh Valley Traction Co. 1st Mtg. 4's, 1929....	23,000 00
5,000 Lehigh Valley R. R. Reg. 7's, 1910.....	5,000 00
51,000 Louisville & Nashville R.R. Unified Gold 4's, 1940	51,197 50
52,000 Long Island R. R. Unified Mtg. 4's, 1949.....	52,225 00
1,000 Lehigh Valley R. R. Consol. Mtg. 4½'s, 1923....	1,060 00
8,000 Lehigh Coal & Navigation Co. 4's, 1914.....	8,000 00
8,000 Lehigh & Wilkes-Barre Coal Co. 4½'s, 1910.....	8,000 00
5,000 Metropolitan Street Railway, Kansas City, Mo. Gen. Mtg. 5's, 1909	4,894 17
41,000 Missouri, Kansas & Texas R. R. 1st Mtg. 4's, 1990.....	40,743 75
8,000 Mortgage Trust Co. 4's, 1911.....	6,880 00
15,000 Montreal Lt., Heat & Power Co. 1st Mtg. 4½'s, 1932	15,000 00
25,000 Market St. Elevated Pass. Ry. 1st Mtg. 4's, 1955..	25,000 00
13,000 Norfolk & Western R. R. Co. 1st Mtg. 6's, 1932..	13,000 00

	Cost.
25,000 North Hudson Light, Heat and Power Co. Mtg. 5's, 1938	\$25,000 00
31,000 Northern Pacific R. R. prior lien 4's, 1997.....	31,000 00
55,000 Norfolk & Western R. R. 1st Cons. Mtg. 4's, 1996.	54,018 75
25,000 Norfolk & Western R. R. Equip. Trust 4's, 1909..	24,522 50
1,000 North Penna. R. R. Gen. Mtg, 3 3-10's, 1953.....	1,000 00
21,000 N. Y., Phila. & Norfolk R. R. Co. 1st Mtg. 4's, 1939	21,000 00
8,000 Norfolk and Western Railway Equip. Trust 4's, 1913	7,688 00
1,000 Norfolk Pacific Ry. Gen. lien and land grant 3's, 2047	770 00
22,000 Ohio River R. R. 1st Mtg. 5's, 1936.....	22,510 00
10,000 Oregon Short Line 25-year Refund 4's, 1929.....	9,687 50
3,000 Phila. & Reading R. R. Cons. 7's, 1911.....	3,000 00
25,000 Phila. & Reading R. R. 4's, 1937.....	25,000 00
3,000 Pittsburgh, Shenango & Lake Erie R. R. 1st Mtg. 5's, 1940	3,000 00
40,000 Pittsburgh Consol. Gas Co. 1st Mtg. 5's, 1948.....	41,000 00
500 Phila. Country Club 1st Mtg. 5's, 1940.....	500 00
9,000 Phila. & Erie R. R. Gen. Mtg. 5's, 1920.....	10,665 00
25,000 Phila. & West Chester Traction Co. 1st Mtg. 5's, 1918	25,000 00
1,000 Penna. & N. Y. Canal & R. R. Consol. Mtg. 4's, 1939	980 00
2,000 Penna. & N. Y. Canal & R. R. Consol. Mtg. 5's, 1939	2,240 00
1,000 Phila., Wilmington & Baltimore R. R Stock Trust 4's, 1921	1,085 00
2,000 Phila. & Erie R. R. Reg. 4's, 1920	2,180 00
20,000 Phila. Electric Gold Trust 5's, 1918	19,993 75
30,000 Penna. Steel Equip. Trust 3½'s, 1908	28,912 50
20,000 Penna. Steel Equip. Trust 3½'s, 1909	19,624 80
21,000 People's Pass. Railway Stock Trust 4's, 1943	21,735 00
125,000 Reading Co. and P. & R. Coal & Iron Co. Gen. Mtg. 4's, 1997	118,201 25
10,000 Raleigh & Gaston R. R. 1st Mtg. 5's, 1947.....	10,332 50
500 Roby Street Dock & Factories Co. 6's, 1907.....	500 00
7,000 Rochester Railway & Light Co. 5's, 1954.....	7,000 00
15,000 Reading Co. (Jersey Central Collateral) 4's, 1951.	14,955 00
1,000 Susquehanna Coal Co., Guar. by Penna. R. R. Co. 6's, 1911.....	1,000 00
111,000 San Antonio & Aransas Pass. R. R. 1st Mtg. 4's, 1943	107,405 00

Treasurer's Report.

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	Cost.
25,000 Scranton Traction Co. 1st Mtg. 6's, 1932.....	\$25,000 00
10,000 Syracuse Rapid Transit Co, 1st. Mtg. 5's, 1946....	10,000 00
21,000 Second Avenue (Pittsburg) Traction Co. 1st Mtg. 5's, 1934	21,000 00
25,000 St. Louis Merchants' Bridge Co. 1st Mtg. 6's, 1929	25,000 00
9,000 Sunbury, Hazleton & Wilkes-Barre R. R. 1st Mtg. 5's, 1928	8,380 00
400 Sunbury, Hazleton & Wilkes-Barre R. R. 2d Mtg. 6's, 1938	393 50
25,000 St. Louis Terminal Cupples Station and Property 1st Mtg. 4½'s, 1917.....	24,468 75
20,000 St. Louis, Iron Mountain & Southern R. R., land grant 5's, 1931	20,000 00
25,000 Schuylkill Traction Co. Gold Mtg. 5's, 1943.....	25,000 00
5,000 Southern Pacific R. R. Stock Collat. 4's, 1949....	5,000 00
10,000 St. Louis, Memphis & Southeastern R. R. Co. 4½'s, 1909.....	9,900 00
25,000 Toledo, Ohio, Electric Street Railway Co. 1st Mtg. 5's, 1912.....	25,000 00
1,000 Tuckerton R. R. Co. 1st Mtg. 6 s, 1910.....	1,000 00
10,000 Third Avenue R. R. 1st Consol. Mtg. 4's, 2000....	10,150 00
10,000 Terminal Railway Asso., St. Louis, Gen. Mtg. 4's, 1953	9,850 00
50,000 Toledo, St. Louis & Western R. R. Co. Prior lien Gold 3½'s, 1925.....	45,488 25
25,000 United Railways Co. Gold Trust 4's, 1949.....	21,250 00
50,000 United Railways of St. Louis 1st Gen. Mtg. 4's, 1934	45,375 00
7,000 United Traction Co., Pittsburg, Gen. Mtg. 5's, 1907	7,280 00
600 University Club Gold 5's, 1922.....	600 00
20,000 Union Pacific R. R. 1st Mtg. land grant 4's, 1947..	18,500 00
10,400 Veterinary Hospital Bonds	10,400 00
2,500 Wilmington, Columbia & Augusta R. R. 1st Mtg. 6's, 1910.....	2,500 00
13,000 Wabash R. R. Co. 2d Mtg. 5's, 1939.....	13,000 00
34,000 Williamsport Gas Co. 1st Mtg. 5's, 1939.....	34,420 00
57,000 Western N. Y. & Penna. R. R. Gen. Mtg. 4's, 1943	54,411 25
23,000 Wheeling & Lake Erie R. R. 1st Consol. Mtg. 4's, 1949	21,562 50
32,000 West Chester Lighting Co. 1st Mtg. 5's, 1950....	32,140 00
40,000 Wilmington & Chester Traction Co. Collat. Trust 5's, 1918.....	40,632 50
	<u>\$2,897,466 38</u>

STOCKS.

		Cost.
10 Shares	American Dredging Co.....	\$1,000 00
10 "	American Snuff Co., pfd.....	1,000 00
27 "	Brooklyn Union Gas Co. common.....	2,160 00
17 "	Continental Pass. Rway. Co.....	2,635 00
500 "	Delaware & Bound Brook R. R.....	105,500 00
80 "	Fidelity Trust Co.....	35,600 00
10 "	Green & Coates Sts. Pass. Rway. Co.....	1,580 00
50 "	Germantown Pass. Rway. Co.....	7,250 00
86 "	Insurance Co. of North America.....	2,022 00
20 "	Iron Mountain Car Trust.....	20,344 00
16 "	Lehigh Valley R. R., pfd.....	800 00
4 "	Lehigh Valley R. R. common.....	176 00
10 "	Lehigh Coal & Nav. Co.....	500 00
61 "	Norfolk & Western R. R.....	5,550 00
17 "	North Penna. R. R.....	1,836 00
475 "	Pennsylvania R. R.....	26,911 08
2,238 "	Phila. & Reading R. R. 2d pfd.....	107,042 00
72 "	Provident Life & Trust Co.....	44,482 00
78 "	Penna. Salt Mfg. Co.....	7,795 50
350 "	Phila. Traction Co.....	34,183 75
10 "	Phila. Co. common.....	500 00
12 "	Phila. & Trenton R. R. Co.....	3,348 00
11 "	Phila., Germantown & Norristown R. R....	1,815 00
134 "	Safe Deposit & Trust Co., Pittsburg, Pa....	7,370 00
9 "	Second & Third Sts. Pass. Rway. Co.....	2,727 00
120 "	Wm. Cramp & Sons Ship & Engine Building Co.....	6,000 00
17 "	Western National Bank.....	1,530 00
25 "	Union Pacific R. R. pfd.....	1,500 00
500 "	United Traction Co., Pittsburg, Pa., pfd....	25,000 00
4 "	United N. J. R. R. & Canal Co.....	1,116 00
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		\$459,273 33
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MORTGAGES.

ON PROPERTY IN PHILADELPHIA AND VICINITY.

No. 707 Lydia Street.....	\$700 00
Wallace and Nineteenth Streets.....	6,000 00
Lancaster Avenue and Rockland.....	2,750 00
Cheltenham Township, Montgomery Co., Pa.....	3,000 00
Jenkintown, Pa.....	4,320 00
Auburn and Tenth Streets.....	9,000 00
Washington Avenue and Twenty-first Street.....	35,000 00
No. 4044 Powelton Avenue.....	3,000 00
" 2262, 2318, 2320 North Front Street.....	8,000 00
" 1343 Mount Vernon Street.....	2,700 00
" 2977 Frankford Avenue.....	4,000 00
" 2987 Frankford Avenue.....	4,000 00
Camden, N. J.....	7,500 00
Thirty-Fifth Ward, City.....	70,000 00
No. 549 North Second Street.....	3,000 00
Manchester, Mass.....	1,000 00
Gray's Ferry Road and Thirtieth Street.....	2,000 00
No. 3451 Woodland Avenue.....	5,500 00
South, Marston and Thirty-third Streets.....	35,000 00
No. 2504 North Broad Street.....	5,500 00
No. 131 Richmond Street.....	1,500 00
Moreland Township, Montgomery Co., Pa.....	3,300 00
No. 2224 Montrose Street, Phila.....	600 00
West Chester Road, Chester Co., Pa.....	111,175 00
Cape May County, N. J.....	35,000 00
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	\$363,545 00

COUPON MORTGAGES.

In Chicago, Illinois.....	\$25,000 00
" " ".....	25,000 00
" " ".....	7,500 00
" " ".....	20,000 00
" " ".....	7,000 00
" " ".....	2,500 00
" " ".....	2,000 00
" " ".....	16,000 00
" " ".....	6,500 00
" " ".....	7,000 00
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	\$118,500 00

GROUND RENTS IN PHILADELPHIA.

No. 29 North Sixth Street.....	\$2,500 00
" 533 North Front Street.....	426 67
" 535 North Front Street.....	426 67
" 537 North Front Street.....	426 67
Green and New Market Streets.....	111 11
Moore and Otsego Streets.....	3,000 00
Oakford, Manton, and Twenty-second Streets, 6 at \$800 each.....	4,800 00
Stiles and Nineteenth Streets.....	900 00
Gray's Ferry Road.....	42,519 00
No. 13 and 15 Parkham Street.....	400 00
" 618 South Seventh Street.....	444 50
" 128 North Water Street.....	1,133 33
Lebanon, Pa.....	66 00
	<hr/>
	\$57,153 95
Loans on Collateral.....	\$24,632 84
" " ".....	10,123 40
" " ".....	5,000 00
" " ".....	5,000 00
" " ".....	8,582 24
" " ".....	103 59
" " ".....	5,400 00
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	<u>\$58,842 07</u>

UNIVERSITY ENDOWMENTS.

	Amount Invested.	Amount Uninvested.
General Fund.....	\$3,075,656 90	\$691 00
J. Herman Raht Fund	250 00	
Phi Kappa Sigma Fund.....	400 00	
Keble Fund.....	13,193 41	
Elliott Cresson Fund.....	4,419 33	
Tobias Wagner Fund.....	5,300 00	
Bloomfield Moore Fund.....	15,000 00	
Thomas A. Scott Fund	50,000 00	
J. H. Towne Fund.....	446,478 76	3,501 88
John Welsh Fund.....	51,947 39	885 77
A. Whitney Fund.....	48,114 43	2,000 00
Scholarship Fund.....	4,644 57	
Benjamin Franklin Scholarship Fund	10,026 12	
Samuel V. Merrick Scholarship Fund.....	3,560 60	
Class 1878 Scholarship Fund	5,000 00	
Matthew Baird Scholarship Fund.....	5,013 06	
E. Otis Kendall Scholarship Fund.....	5,000 00	
Adam Seybert Fund.....	49,045 74	4,300 00
Chair of Christian Ethics Fund.....	3,015 36	
Alumni Hall Fund.....	6,663 79	
Hector Tyndale Fellowship Fund.....	12,194 78	
S. W. Roberts Fund.....	1,114 83	
Wharton School Fund.....	529,425 00	
Assyrian Fellowship Fund	189 55	
Pepper Professorship of Hygiene Fund.....	59,400 00	
J. Rhea Barton Fund.....	49,865 48	5 00
J. Gillingham Fell Fund.....	1,243 69	
Auxiliary Faculty Medical Fund.....	29,797 96	1,750 98
Leidy Chair of Anatomy Fund.....	1,994 49	
Botanic Garden Fund.....	4,302 99	
Department of Biology Fund.....	62,855 22	300 00
I. V. Williamson Fund.....	47,488 00	42 00
George S. Pepper Residuary Legatee Fund..	33,020 87	4,333 00
Francis S. Pepper Scholarship Fund	7,150 00	
Chair of Pedagogy Fund.....	250 00	
Henry Reed Prize Fund	743 12	
Latin Prize Fund.....	1,025 80	
Oratory Prize Fund.....	360 80	
English Composition Prize Fund.....	200 00	
Arthur Spayd Brooke Memorial Prize Fund..	1,000 00	

	Amount Invested.	Amount Uninvested
J. Warner Yardley Prize Fund.....	\$500 00	
Class 1880 Prize Fund.....	1,000 00	
Allen Memorial Prize Fund.....	1,000 00	
P. Pemberton Morris Prize Fund	1,000 00	
Joseph M. Bennett Bequest Fund.....	523,461 75	\$7,151 :
Rev. C. P. Krauth Library Fund	1,621 06	
Agriculture Library Fund.....	916 00	
Pepper Medical Library Fund.....	7,708 19	
Tobias Wagner Library Fund.....	11,947 59	207 :
J. B. Lippincott Library Fund.....	7,000 00	
Isaac Morris Library Fund.....	5,233 69	
Reese Wall Flower Fund.....	191,482 24	
John Harrison Laboratory of Chemistry Fund	114,829 82	
Veterinary Fund.....	31,800 70	
Joseph M. Bennett Fund (Bennett Hall)	17,500 00	
Howard Houston Hall Fund.....	157,435 78	
Howard Houston Hall Endowment Fund....	500 00	
Dormitory First Section Fund.....	355,016 58	
Dining Hall Fund	14,799 58	
Dental Hall Fund	159,138 66	
Wistar and Horner Museum Fund.....	40,110 11	
Department of Law Fund.....	7,735 08	
John F. Frazer Fund.....	11,259 37	
Department of Hygiene Fund.....	190,688 05	97 :
Laboratory of Hygiene Fund.....	15,001 75	
Thomas A. Scott Fellowship Fund	11,725 00	
Joseph M. Bennett Endowment Graduate Department.....	45,737 50	
A. S. Biddle Fund.....	20,250 00	
Simon Muhr Fund	9,490 60	31 :
George L. Harrison Foundation.....	627,506 55	3,613 :
Stillé Memorial Library Fund.....	1,000 00	
John Stewardson Memorial Fund.....	17,667 26	479 :
John White Field Scholarship Fund.....	10,000 00	
Pepper Hall Endowment Fund.....	50,012 50	
University Fund for Women	100 00	
Professors' Retiring Fund.....	6,776 25	
Clark Chair of Assyriology Fund.....	99,925 00	
Thomas S. Stewart Scholarship Fund.....	5,000 00	
Robert Morris Scholarship Fund.....	5,000 00	
James Logan Scholarship Fund.....	5,000 00	
Garrett Scholarship Fund.....	10,000 00	
Thomas H. Powers Scholarship Fund.....	5,000 00	
Hartman Kuhn Scholarship Fund.....	5,000 00	

Treasurer's Report.

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	Amount Invested.	Amount Uninvested.
Charles Brinton Coxe Scholarship Fund.....	\$5,000 00	
Cadwallader Scholarship Fund.....	4,937 50	\$87 50
Rev. James Latta Scholarship Fund.....	5,000 00	
Louise Harrison Scholarship Fund	5,122 50	
Stephen Greene Scholarship Fund.....	5,000 00	
Blanchard Fund.....	54,887 50	
Suddards Fund.....	997 50	2 50
Albert Wilson Memorial Scholarship Fund...	2,495 00	102 95
Sinking Fund.....		625 00
Bond Interest.....		535 98
Spencer Morris Prize Fund.....	9,925 00	
George Barnett Scholarship Fund.....	5,000 00	
J. B. Lippincott Veterinary Fund.....	97,712 50	283 75
Eckley B. Coxe Scholarship Fund.....	5,000 00	
Erskine Hazard Dickson Memorial Fund.....	25,000 00	
Martha Austin McDowell Scholarship Fund..	4,950 00	50 00
Erskine Hazard Dickson Memorial Lib. Fund.	1,970 00	30 00
John H. Converse Scholarship Fund.....	4,906 20	93 80
Mask and Wig Club Fund.....	4,950 50	
Sommerville Collection.....		19,364 16
	<hr/>	<hr/>
	\$7,693,082 90	\$50,565 02

Hospital Endowments.	Amount Invested.	Amount Uninvested.
General Fund.....	\$943,457 31	\$9,094 19
Hahn Ward Fund.....	54,689 75	
Alumni Ward Fund.....	10,045 25	
Mrs. G. W. Norris Fund.....	10,000 00	
Bement Fund.....	5,000 00	
Ward Chronic Diseases Fund.....	280,147 56	2,467 16
Dr. William Pepper Clinical Laboratory Fund	25,030 00	
I. V. Williamson Hospital Fund.....	47,621 25	32 50
Children's Ward Fund.....	32 07	
Henry Seybert Fund.....	58,239 77	377 54
George S. Pepper Fund.....	74,572 33	307 12
Recto-Genito-Urinary Fund.....	4,100 39	
Anna M. Powers Bed Fund.....	6,000 00	
Mary W. Eskens Bed Fund.....	5,000 00	
Dr. D. Hayes Agnew Hospital Fund.....	171,645 57	
Dr. D. Hayes Agnew Bequest for Care of Sick Children	48,995 00	1,005 00
Dr. D. Hayes Agnew Bequest for Maternity Hospital	1,000 00	

Hospital Endowments.	Amount Invested.	Amount Uninvested
Children's Medical Ward Fund	\$990 00	
Andrew C. Butler Fund.....	5,432 67	
Ligonier Fund.....	41,218 06	\$197 72
Children's Orthopedic Ward Fund.....	14,140 00	
Nurses' Home Fund	450 00	
A. Sydney Roberts Apparatus Fund.....	6,264 54	
John White Field Fund.....	5,000 00	
Abby Willing Peters Fund	5,000 00	
Maternity Fund.....	24,846 20	150 05
Edward Rhodes Memorial Fund.....	3,401 51	
Alfred Gustavus Baker Fund.....	5,000 00	
Abraham and Mary Baker Fund.....	5,100 00	
Mary B. K. Wainright Fund.....	5,000 00	
Hamilton Disston Fund.....	3,000 00	
Percival Roberts Fund.....	3,000 00	
Thomas Harrison Fund.....	5,100 00	
Langstroth Fund.....	500 00	
Richard Heckscher Fund.....	5,031 25	
Woodward Fellowship Fund.....	20,912 50	154 24
Josephine S. Wentz Fund.....	5,000 00	
Thomas Elkinton Fund.....	4,500 00	167 91
George W. Vogel Fund.....	10,011 81	
Diet Kitchen Fund.....	1,500 00	
Emily M. Harrison Fund.....	4,981 88	18 12
Edward Roberts, Jr., Fund.....	5,000 00	
Mary Kay Fund.....	5,000 00	
Hiram Brooke Fund.....	4,987 50	12 50
Anna D. Scott Memorial Fund.....	15,000 00	
Sinclair Tousey Bed Fund	4,955 00	45 00
Sabin Woolworth Colton 3d Bed Fund.....	3,000 00	
Sommerville Bed Fund.....		10,191 60
	<hr/>	<hr/>
	\$1,968,899 17	\$24,220 65

Building Funds.	Amount Invested.	Amount Uninvested.
Free Museum Science and Art.....	\$391,831 08	\$17,919 40
Dormitories and Memorial Tower, Second Section	258,244 48	
Law School and Lot.....	582,024 18	
Randal Morgan Laboratory of Physics.....	125,540 40	2,133 00
Randal Morgan Laboratory of Physics Equip- ment.....	20,288 68	2,824 86
Premises Thirty-third and Locust Streets.....	29,125 00	

Treasurer's Report.

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Building Funds.	Amount Invested.	Amount Uninvested.
New Engineering Department Building.....	\$368,714 43	\$10,357 65
New Engineering Department Building Equip- ment.....	27,011 58	
New Medical Laboratory Building.....	668,880 80	\$317 60
New Medical Laboratory Apparatus.....	20,221 65	
Dormitory, Third Section.....	50,580 33	502 88
Dormitory, Fourth Section.....	1,085 62	22,164 38
Sun Parlor.....	7,867 91	
Sun Parlor, Ward G.....		1,500 00
Isolation Ward.....	21,776 41	
New Laundry.....	14,382 04	
X-Ray Plant.....	25,000 00	
Veterinary Building.....		10 00
	<hr/> \$2,612,574 59	<hr/> \$57,729 77

Income Account.	Amount received, including Balance, August 31, 1904,	Amount Expended.	Balance.
General Fund.....	\$1,901 86	\$1,901 86	
J. Herman Raht Fund.....	12 50	12 50	
Phi Kappa Sigma Fund.....	20 00	20 00	
Keble Fund.....	1,340 11	1,340 11	
Elliott Cresson Fund.....	212 12	212 12	
Tobias Wagner Fund.....	265 00	265 00	
Bloomfield Moore Fund.....	752 25	752 25	
Thomas A. Scott Fund.....	2,471 36	2,471 36	
John H. Towne Fund.....	13,551 54	13,551 54	
John Welsh Fund.....	2,380 66	2,380 66	
A. Whitney Fund.....	2,276 86	2,276 86	
Scholarship Fund.....	170 16	170 16	
Benjamin Franklin Scholarship Fund.....	526 30	526 30	
Samuel V. Merrick Scholarship Fund.....	140 40	140 40	
Class 1878 Scholarship Fund....	100 00	100 00	
Matthew Baird Scholarship Fund	300 66	300 66	
E. Otis Kendall Scholarship Fund	100 00	100 00	
Adam Seybert Fund.....	2,714 78	2,714 78	
Chair Christian Ethics Fund....	376 90		\$376 90
Alumni Hall Fund.....	311 28	311 28	
Hector Tyndale Fellowship Fund	614 06	614 06	
S. W. Roberts Fund.....	55 74	55 74	
Wharton School Fund.....	18,280 58	9,379 20	8,901 38
Assyrian Fellowship Fund.....	9 48	9 48	

Income Account.	Amount received, including Balance. August 31, 1904.	Amount Expended.	Balance.
Pepper Professorship of Hygiene			
Funds.....	\$3,041 52	\$3,041 52	
J. Rhea Barton Fund.....	1,748 52	1,748 52	
J. Gillingham Fell Fund.....	26 19	26 19	
Auxiliary Faculty Medicine Fund	1,201 56	1,201 56	
Leidy Chair Fund.....	98 33	98 33	
Botanical Garden Fund.....	208 62	208 62	
Department Biology Fund.....	52	52	
I. V. Williamson Fund.....	1,967 44	1,967 44	
George S. Pepper Residuary			
Legatee Fund.....	1,740 56	1,740 56	
Francis S. Pepper Fund.....	337 22	337 22	
Chair of Pedagogy Fund.....	11 88	11 88	
Henry Reed Prize Fund.....	125 97	24 00	\$101 97
Latin Prize Fund.....	173 17	40 00	133 17
Oratory Prize Fund.....	51 75		51 75
English Composition Prize Fund	34 83	8 00	26 83
Arthur Spayd Brooke Memorial			
Prize Fund.....	190 00	166 70	23 30
J. Warner Yardley Prize Fund..	124 94		124 94
Class 1880 Prize Fund.....	300 17		300 17
Allen Memorial Prize Fund....	55 58	40 00	15 58
P. Pemberton Morris Prize Fund	40 14	40 00	14
Joseph M. Bennett Bequest Fund	26,965 20	26,965 20	
Rev. C. P. Krauth Library Fund.	111 69	93 64	18 05
Agricultural Library Fund.....	92 29	44 71	47 58
Dr. William Pepper Library			
Fund.....	562 69	361 84	200 85
Tobias Wagner Library Fund...	616 88	449 80	167 08
J. B. Lippincott Library Fund...	567 32	462 18	105 14
Isaac Norris Library Fund.....	273 49	84 99	188 50
Reese Wall Flower Fund.....	2,712 53	2,698 03	14 50
Veterinary Fund.....	963 94	963 94	
Houston Hall Endowment Fund.	23 74	23 74	
Dormitory First Section Fund...	100 00	100 00	
Wistar and Horner Museum			
Fund.....	5 50	5 50	
Department of Law Fund.....	386 76	386 76	
John F. Frazer Fund.....	405 54	405 54	
Department of Hygiene Fund...	5,498 93	5,498 93	
Thomas A. Scott Fellowship			
Fund.....	359 24	359 24	
Joseph M. Bennett Endowment			
Graduate Department Fund.	2,340 90	2,212 65	128 25

Treasurer's Report.

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Income Account.	Amount received, including Balance, August 31, 1904.	Amount Expended.	Balance.
A. S. Biddle Fund.....	\$958 30	\$958 30	
Simon Muhr Fund.....	291 28	291 28	
George L. Harrison Foundation.	27,768 26	27,768 26	
Stillé Memorial Library Fund...	86 72	18 26	\$68 46
John Stewardson Fund.....	1,762 06	1,070 57	691 49
John White Field Scholarship Fund.....	454 57	414 57	40 00
Pepper Hall Endowment Fund..	2,723 00	2,198 00	525 00
University Fund for Women....	20 00		20 00
Professors' Retiring Fund.....	1,189 40		1,189 40
Clark Chair of Assyriology Fund	4,275 85	4,275 85	
Thomas S. Stewart Scholarship Fund.....	200 00	200 00	
Robert Morris Scholarship Fund	250 00	250 00	
James Logan Scholarship Fund..	250 00	250 00	
Garrett Scholarship Fund.....	467 08	467 08	
Thomas H. Powers Scholarship Fund.....	236 76	236 76	
Hartman Kuhn Scholarship Fund	250 00	250 00	
Charles Brinton Coxe Scholar- ship Fund.....	200 00	200 00	
Cadwalader Scholarship Fund..	177 50	177 50	
Powers Professorship Salary Fund.....	40 00	40 00	
Rev. James S. Latta Scholarship Fund.....	200 00	200 00	
Louise Harrison Scholarship Fund.....	240 00	240 00	
Stephen Greene Scholarship Fund.....	200 00	200 00	
Blanchard Fund.....	1,512 50	1,512 50	
Suddards Fund.....	60 00	60 00	
Albert Wilson Memorial Scholar- ship Fund.....	90 00	90 00	
Spencer Morris Prize Fund.....	325 00	20 75	304 25
George Barnet Scholarship Fund	100 00	100 00	
J. B. Lippincott Veterinary Fund	3,312 50	3,312 50	
Eckley B. Coxe Scholarship Fund.....	225 00	225 00	
Erskine Hazard Dickson Me- morial Fund	820 00	820 00	
Martha Austin McDowell Scholar ship Fund.....	112 50	112 50	

Income Account.	Amount received, including Balance, August 31, 1904.	Amount Expended.	Balance.
Ersine Hazard Dickson Library			
Fund.....	\$46 20	\$46 20	
Mask and Wig Club Fund.....	45 00	45 00	
Department of Archæology and Paleontology Fund.....	30 00	30 00	
Randal Morgan Laboratory of Physics Fund.....	1,050 00	1,050 00	
Dormitory Second Section Fund	400 00	400 00	
	<hr/>	<hr/>	
	\$152,719 63		\$13,764 68
Less Balances August 31, 1904.....	4,154 27		
	<hr/>		
Net Income.....	\$148,565 36		

FUNDS NOT FOR INVESTMENT.

	Amount received, including Balance, August 31, 1904.	Amount Expended.	Balance.
General Fund.....	\$719 81	\$719 81	
Botanical Garden Fund.....	2,299 70	2,299 70	
Eugene Delano Prize Fund.....	50 00	50 00	
"J. S. H." Prize Fund.....	75 00	75 00	
Library—Philosophy Fund.....	55 16	55 16	
“ Medieval Fund.....	8 43	8 43	
“ Warren Fund.....	46 31	41 30	\$5 01
“ Periodicals Fund.....	3,464 79	2,824 12	640 67
“ Dante Fund.....	52 23		52 23
“ Blue Book Fund.....	1 31	1 31	
“ Botany Fund.....	374 19	352 63	21 56
“ Old English Plays Fund	642 13	461 83	180 30
“ Alumni Fund Biddle Library.....	1,765 69	1,603 97	161 72
“ Music Fund.....	279 24	30 17	249 07
“ Insurance Fund.....	6 68	6 00	68
Chemical Laboratory Apparatus Fund.....	1,618 48	73 65	1,544 83
Medical Bulletin Fund.....	2,043 14	2,043 14	
Contributions to Veterinary Fund	2,000 00	2,000 00	
New Gymnasium Fund.....	1,500 00	1,500 00	

Treasurer's Report.

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Income Account.	Amount received, including Balance, August 31, 1904.	Amount Expended.	Balance.
Alliance Française Fellowship Fund.....	\$300 00	\$300 00	
College Settlement Fund.....	200 00	200 00	
Increase College Salaries Fund..	12,150 00	12,150 00	
Special Geography Fund.....	87 68	13 08	\$74 60
Library Franklin Manuscripts Fund.....	83 40	83 40	
Naples Table Fund.....	50 00	50 00	
Woods Hall Table Fund.....	50 00	50 00	
Contributions Current Expenses University Fund.....	6,073 82	5,073 82	1,000 00
Contributions Salaries Adminis- tration Library Fund.....	270 00	270 00	
Eckley B. Coxe, Jr., Fund.....	4,385 82	1,438 05	2,947 77
Mrs. E. W. Harrison Fund for Collection of Casts.....	26 27		26 27
Architecture Lecture Course Fund.....	9 92		9 92
" Equipment Fund..	301 43	57 50	243 93
" General Fund.....	171 52		171 52
" Peabody Fund.....	12 42		12 42
Law School Monograph Fund...	333 30	35 75	297 55
Needy Students' Aid Fund.....	5,188 00	4,138 00	1,050 00
University Publication Fund....	3,942 59	2,291 58	1,651 01
Fellowship in History Fund.....	225 00	225 00	
Interest Account.....	1,226 59	1,226 59	
Frazer Debate Prize Fund.....	100 00	100 00	
Campus Fund.....	3,586 52	1,620 05	1,966 47
Contributions Current Expenses Library Fund.....	628 99	473 54	155 45
Architecture Salary Fund.....	3,590 00	3,590 00	
Architecture Fellowship Fund...	1,000 00	1,000 00	
Law Library Fund.....	5,116 64	5,016 22	100 42
Sundry Friends of the University Fund.....	40,000 00	40,000 00	
John C. Ropes Fund.....	4 95		4 95
University View Fund.....	1,175 00	398 00	777 00
College Apparatus Fund.....	1,679 60	1,659 55	20 05
James Truman House Dormitory Fund.....	50 00		50 00
Christian Association U. of P. Fund.....	250 00	250 00	
Flanders Lecture Course Fund..	1,125 00	1,000 00	125 00

University of Pennsylvania.

Income Account.	Amount received, including Balance, August 31, 1904.	Amount Expended.	Balance
Epiadiascope Fund.....	\$100 00		\$100
Gymnasium Deficiency Fund ...	1,475 00		1,475
Frazier Special Medical Fund...	850 00	\$193 64	656
Houston Hall Library Fund	710 09		710
Veterinary Insurance Fund.....	4,008 77		4,008
			<hr/> \$20,490
Less Temporary Loans			12,805
			<hr/> \$7,685 <hr/>

UNIVERSITY TRUSTS ACCOUNT.

BALANCE SHEET.

Balance August 31, 1904.....		\$193,071 01
Dr.		
To Donations for Investment...	\$379,496 31	
" Donations not for Investment	247,225 40	
	<hr/>	\$626,721 71
" Investments sold or paid.....	147,401 53	
" Income received	148,565 36	
" Premium received.....	1,651 00	
" Increase in Capital	112,223 09	
" Tuition Fees Transferred.....	5,116 64	
" Advances to Trusts by Administration....	88,905 07	
" Amount received from Departments ac- count Sinking Fund and Interest.....	9,910 53	
" Interest received.....	3,784 02	
" Return Premium, Insurance of Veterinary Buildings, cancelled.....	4,047 27	
" Sales of material.....	275 10	
" Cash returned.....	321 70	
	<hr/>	1,148,923 02
		\$1,341,994 03
Cr.		
By Investments made.....	\$516,286 15	
" Premiums and Accrued Interest.....	4,921 31	
" Income transferred to Administration....	102,884 98	
" Funds transferred to Administration.....	49,637 45	
" Taxes, Water Rent, Repairs, Insurance and Legal Expenses.....	9,209 12	
" Cash Payments on account Trusts.....	29,790 71	
" Advances by Administration paid.....	83,396 90	
" Amount paid on account Sinking Fund and Interest.....	10,750 00	
" Amount paid on account Buildings, Grounds and Equipment.....	349,247 24	
" Loss of Capital, Veterinary Hospital Buildings, torn down.....	52,129 86	
" Amount paid on account loan Law Library	2,000 00	
" Loan, Department of Physical Education..	3,500 00	
	<hr/>	1,213,753 72
Balance August 31, 1905.....		<u>\$128,240 31</u>

ADMINISTRATION.

GENERAL BALANCE SHEET.

Balance August 31, 1904.....	\$68,596 31	
Bursar's Cash	600 00	\$69,196
<hr/>		
Dr.		
To Tuition Fees.....	\$368,082 35	
“ Graduation Fees.....	8,408 87	
“ Income from Trusts.....	102,884 98	
“ Funds not for Investment.....	49,637 45	
“ Amounts received from Departments :		
Veterinary Hospital.....	\$9,565 00	
Central Light and Heat		
Station.....	52,785 55	
Dormitories.....	56,420 51	
Department of Repairs....	6,636 65	
	<hr/>	\$125,407 71
“ Advances to Trusts returned.....	84,637 05	
“ Students' Deposits received.....	18,810 75	
“ Sinking Fund.....	10,000 00	
“ Gymnasium fees.....	7,047 20	
	<hr/>	844,111
Cr.		
By Salaries Educational.....	\$367,414 82	
“ Salaries Administration.....	101,756 39	
“ Current Expense Account.....	192,633 65	
“ Prize Money paid.....	592 99	
“ Advances to Trusts.....	90,145 22	
“ Students' deposits returned.....	14,250 81	
“ Transfer to Trusts.....	5,116 64	
	<hr/>	771,910
	<hr/>	
Balance August 31, 1905.....		<u><u>\$72,201</u></u>

ANALYSIS OF ADMINISTRATION ACCOUNTS.

		Surplus.	Deficit.
College :			
Current Expense Ac-			
counts.....	\$70,460 23		
Salaries, Education...	209,894 32		
" Administration			
tion.....	11,559 58		
	<u>291,914 13</u>		
Tuition Fees.....	\$177,711 25		
Income.....	65,751 17		
	<u>243,462 42</u>		
			\$48,451 71

Department of Medicine :			
Current Expense Ac-			
counts.....	42,074 64		
Salaries, Education...	71,632 94		
" Administration			
tion.....	14,289 02		
	<u>127,996 60</u>		
Tuition Fees.....	\$106,707 18		
Income.....	2,783 11		
	<u>109,490 29</u>		
			18,506 31

Department of Law :			
Current Expense Ac-			
counts.....	\$12,220 31		
Salaries, Education...	30,466 02		
" Administration			
tion.....	6,635 69		
Transfer to Law Li-			
brary.....	5,116 64		
	<u>54,438 66</u>		
Tuition Fees.....	\$42,638 70		
Income.....	1,345 06		
	<u>43,983 76</u>		
			10,454 90

Department of Dentistry :	
Current Expense Ac-	
counts.....	6,147 79

Salaries, Education...	\$29,003 32		Surplus.	Defi
" Administration.....	3,201 00			
		\$38,352 11		
Tuition Fees.....		34,170 33		
				\$4,181

Department of Hygiene :

Current Expense Account.....	\$2,264 56			
Salaries, Education...	3,333 53			
" Administration.....	540 00			
		6,138 09		
Tuition Fees.....	\$50 00			
Income.....	8,899 69			
		8,949 69		
			\$2,811 60	

George L. Harrison Foundation :

Salaries, Education...	\$16,209 73
Income.....	16,209 73

Department of Veterinary Medicine :

Current Expense Account.....	\$4,194 03			
Salaries, Education...	4,375 00			
" Administration.....	1,705 83			
		\$10,274 86		
Tuition Fees.....	\$6,804 89			
Income.....	3,562 50			
		10,367 39		
			92 53	

Department of Veterinary Hospital :

Current Expense Account.....	\$7,715 39			
Salaries, Administration.....	5,646 41			
		\$13,361 80		
Receipts.....	\$9,565 00			
Income.....	443 94			
		10,008 94		
			3,352	

Treasurer's Report.

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		Surplus.	Deficit.
Department of Repairs :			
Current Expense Account.....	\$4,729 66		
Salaries, Administration.....	840 00		
	<u>\$5,569 66</u>		
Receipts.....	6,636 65	\$1,066 99	
Central Light and Heat Station :			
Current Expense Account.....	\$43,369 85		
Salaries, Administration.....	13,649 96		
	<u>\$57,019 81</u>		
Receipts.....	52,785 55		\$4,234 26

SUMMARY :

Deficits :			
College.....	\$48,451 71		
Department of Medicine.....	18,506 31		
" " Law.....	10,454 90		
" " Dentistry.....	4,181 78		
" " Veterinary Hospital.....	3,352 86		
Central Light and Heat Station.....	<u>4,234 26</u>		\$89,181 82
Surplus:			
Department of Hygiene.....	\$2,811 60		
" " Veterinary Medicine.....	92 53		
" " Repairs.....	<u>1,066 99</u>		\$3,971 12
Net Deficit.....			<u>\$85,210 70</u>
Dormitory :			
Receipts.....		\$56,420 51	
Salaries, Administration.....	8,619 30		
Current Expenses.....	<u>16,798 84</u>		\$25,418 14
			<u>\$31,002 37</u>

HOSPITAL.

GENERAL BALANCE SHEET.

Balance August 31, 1904.....		\$15,201 39
Receipts :		
From Investments sold or paid off.....	\$64,768 50	
" Premiums received.....	545 00	
" Donations for Investment.....	73,678 30	
" Donations not for Investment.....	133,698 16	
" Income from Invested Funds.....	48,495 69	
" Additional Capital.....	7,905 38	
" Receipts at Hospital.....	17,170 50	
" Interest on Bank Balances.....	64 26	
		<hr/> 346,325 79
Total Receipts.....		\$361,527 18
Expenditures :		
Paid to Superintendent.....	\$128,460 44	
Investments made.....	110,383 40	
Accrued Interest paid.....	148 39	
Premiums paid.....	168 75	
Alterations and Repairs to Real Estate.....	10,169 36	
Legal Expenses.....	1,240 15	
Paid Woodward Fellow.....	430 58	
" Mrs. W. Romaine Newbold, Treasurer....	20 00	
" Mrs. John L. Muckle, Jr., Treasurer.....	20 00	
" Mrs. Edward Browning, Treasurer.....	60 85	
" Maintenance Pepper Laboratory.....	5,746 90	
" on account X-Ray Building.....	17,290 00	
" " " X-Ray Apparatus.....	3,758 96	
" " " Orthopedic Machine Shop....	1,400 00	
" " " Sun Parlor.....	6,667 91	
" " " Isolation Ward.....	21,776 41	
" " " New Laundry.....	14,382 04	
		<hr/> 322,124 14
Balance August 31, 1905.....		<u><u>\$39,403 04</u></u>
Of which there are :		
Special Funds.....	\$15,182 39	
Funds for Investment.....	24,220 65	
		<hr/> <u><u>\$39,403 04</u></u>

HOSPITAL TRUST ACCOUNT.

INCOME RECEIVED FROM TRUSTS, FROM AUGUST 31, 1904, TO AUGUST 31, 1905, INCLUSIVE.

General Fund.....	\$16,560 72
Hahn Ward Fund.....	2,963 23
Alumni Ward Fund.....	451 32
Mrs. G. W. Norris Fund.....	514 73
Bement Fund.....	400 00
Ward Chronic Diseases Fund.....	7,114 81
Pepper Clinical Laboratory Fund.....	3 60
I. V. Williamson Hospital Fund.....	1,962 16
Children's Ward Fund.....	1 66
Henry Seybert Fund.....	3,707 92
George S. Pepper Fund.....	2,973 57
Recto-Genito-Urinary Fund.....	202 42
A. M. Powers Fund.....	180 00
M. W. Eskens Fund.....	250 00
Dr. Agnew Hospital Fund.....	154 73
Dr. Agnew Bequest for Care of Children.....	1,832 34
Dr. Agnew Bequest for Maternity Hospital....	50 00
Children's Medical Ward.....	40 00
Andrew C. Butler Fund.....	241 06
Ligonier Fund.....	1,997 32
Children's Orthopedic Ward Fund.....	700 00
A. Sydney Roberts Apparatus Fund.....	160 94
John White Field Bed Fund.....	227 30
Abby Willing Peters Bed Fund.....	227 25
Maternity Fund.....	1,553 98
Edward Rhoades Memorial Fund.....	166 42
Alfred Gustavus Baker Fund.....	250 38
Abraham and Mary Baker Fund.....	112 50
Mary B. K. Wainright Fund.....	24 00
Hamilton Disston Fund.....	120 00
Percival Roberts Fund.....	120 00
Thomas Harrison Fund.....	200 00
Langstroth Fund.....	30 00
Richard Heckscher Fund.....	200 00
Woodward Fellowship Fund.....	873 08
Wentz Bed Fund.....	201 49

Thomas Elkinton Fund.....	\$212 50
George W. Vogel Fund	454 00
Diet Kitchen Fund.....	60 00
Emily M. Harrison Fund.....	200 26
Edward Roberts, Jr., Fund.....	200 00
Mary Kay Fund.....	200 00
Hiram Brooke Fund.....	225 00
Sinclair Tousey Fund.....	100 00
Sabin W. Colton, 3d., Fund	75 00
	<hr/>
	<u>\$48,495 6</u>

DONATIONS TO THE UNIVERSITY.

ARCHÆOLOGY AND PALEONTOLOGY DEPARTMENT.

Sommerville Estate, Maxwell, Deceased.....	\$17,919 40
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ARCHITECTURE EQUIPMENT FUND.

Bodine, Samuel F.....	100 00
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ARCHITECTURE GENERAL FUND.

Rosengarten, Joseph G.....	100 00
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ARCHITECTURE SALARY FUND.

" Anonymous "	\$100 00
Austin, H. O.....	10 00
Baker, Frank L.....	10 00
Baum, George C.....	10 00
Bissell, E. T.	10 00
Bodine, F. L.....	10 00
Brockie, A. H.....	10 00
Clarke, J. O.....	10 00
Davis, Miss Martha.....	10 00
Davis, Paul A., 3d.....	10 00
DeGelleke, G. J.....	10 00
Dentz, J. G.....	10 00
Dick, G. A.....	10 00
Dowler, T. C.....	20 00
Duhring, H. L.....	20 00
Edmunds, F. D.....	10 00
Fisher, C. S.....	10 00
Frank, J. Horace.....	10 00
Githens, A. M.....	10 00
Grant, Charles C.....	10 00
Hays, William Charles.....	20 00
Heacock, J. Linden.....	10 00
Hill, M. Walter.....	10 00

Hokanson, O. M.....	\$10 00
Johnson, V. L.....	10 00
Jory, H. G.....	10 00
Karcher, W. T.....	10 00
Kast, M. G.....	10 00
Kintzing, L.....	10 00
Kleeman, William.....	10 00
Kalbe, Arno.....	20 00
Kuenzli, E. O.....	10 00
Kropff, H. M.....	10 00
Leisenring, L. M.....	10 00
Magaziner, Louis.....	10 00
Medary, M. B.....	10 00
Miles, J. S.....	10 00
Mills, C. S.....	10 00
Neff, Conrad F.....	10 00
Oakley, T.....	10 00
Okie, R. B.....	10 00
Perot, R. L.....	10 00
Perrot, Emile G.....	10 00
Rommel, F. A.....	10 00
Ruhe, Wallace E.....	10 00
Rush, Louis H.....	20 00
Shrigley, A.....	10 00
Sinkler, J. P. B.....	10 00
Spaulding, W. H.....	10 00
Scull, William Ellis.....	100 00
Smith, Edward B.....	100 00
Stuart, P. G.....	10 00
Taylor, G. H.....	20 00
Trumbower, W.....	10 00
Ward, A. L.....	10 00
Wetterau, Carl.....	20 00
Wilcox, W. R. B.....	20 00
Willauer, A. E.....	10 00
Willing, J. E.....	10 00
Wright, H.....	10 00
Zantzing, C. C.....	10 00
Ziegler, C. A.....	10 00
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	\$970 00

BLANCHARD FUND.

Blanchard, The Misses.....	25,000 00
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BOTANIC GARDEN FUND.

Botanical Society of Pennsylvania	\$1,199 70	
Magée, Miss Fannie S.	250 00	
Magée, Miss Eliza J.	250 00	
Morris, John T.	250 00	
Morwitz, Joseph.	100 00	
Presser, Theodore.	200 00	
Rosengarten, Joseph G.	50 00	
	<hr/>	\$2,299 70

**CAMPUS FUND—THROUGH MRS. C. C.
HARRISON.**

Beckwith, Mrs. Harriet M.	\$20 00	
Brock, Mrs. R. C. H.	25 00	
Brooke, Mrs. George.	10 00	
Clark, Miss Frances	10 00	
Coxe, Alexander B.	50 00	
Dana, Charles E.	5 00	
Dolan, Thomas	1,000 00	
Ellis, Rudolph.	50 00	
Fisher, Mrs. James Logan	10 00	
Hacker, Mrs. Charles.	10 00	
Harris, Mrs. Mary Powers.	50 00	
Harrison, Mrs. C. C.	84 50	
Harrison, Thomas S.	50 00	
Heckscher, Mrs. Richard.	10 00	
Hinchman, Mrs. Lydia.	10 00	
Hutchinson, Miss Margaretta.	15 00	
Ingersoll, Charles Edward.	10 00	
Lesley, R. W.	10 00	
McKean, Mrs. Thomas.	100 00	
Morris, Mrs. Lydia T.	10 00	
Paul, Dr. James.	20 00	
Paul, James W., Jr.	25 00	
Paul, Miss Mary W.	10 00	
Reilly, Thomas A.	25 00	
Schweinitz, Dr. George E. de.	25 00	
Smith, Mrs. Elizabeth T.	5 00	
Spencer, John Thompson.	10 00	
Valentine, John R.	50 00	
Winpenny, Mrs. J. Bolton.	10 00	
	<hr/>	\$1,719 50

CHEMICAL LABORATORY APPARATUS FUND.

Myers, Angelo	\$500 00
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CHRISTIAN ASSOCIATION—UNIVERSITY OF
PENNSYLVANIA.

Dickson, Mrs. Samuel.....	\$250 00
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COLLEGE APPARATUS FUND.

Brooks, James C.....	\$500 00
Gerstley, Louis	250 00
Gest, John M.....	79 60
Kohn, Simon I. and Samuel	500 00
Kribs, H. G.....	250 00
Rosengarten, Joseph G.....	100 00
	<hr/>
	\$1,679 60

COLLEGE SETTLEMENT FUND.

Lewis, Lawrence.....	200 00
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DORMITORY—THIRD SECTION.

Caldwell, J. Albert.....	\$250 00
Davis, John C. S.....	250 00
Fletcher Estate, George A., Deceased.....	1,000 00
Graves, N. Z.....	1,000 00
Helme, William E.....	250 00
Snellenberg, Samuel.....	500 00
Stinson, Samuel B.....	250 00
Wagner, John and Sons.....	500 00
Woodside, John W.....	1,000 00
	<hr/>
	\$5,000 00

DORMITORY—FOURTH SECTION.

"Anonymous"	\$2,500 00
Carruth, John G.....	2,500 00
Greene, Stephen.....	5,000 00
Harrison, Mrs. C. C.....	5,000 00
Merrick, J. Vaughan.....	500 00
Potts, Mrs. Joseph D., through Mrs. C. C. Harrison.....	5,000 00
Rosengarten, Miss Fanny.....	500 00
Rosengarten, Joseph G.....	500 00
Smith, A. Lewis.....	250 00
Stewart, Ralph C.....	1,000 00
Townsend, Charles C.....	500 00
	<hr/>
	\$23,250 00

DORMITORY—TRUMAN HOUSE.

Miller, W. D.....	50 00
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ENDOWMENT FUND, UNIVERSITY—THROUGH
MRS. C. C. HARRISON.

Coxe, Eckley B., Jr.....	\$5,000 00	
Harrison, Alfred C.....	1,000 00	
Potts, William M.....	5,000 00	
Roberts, Miss Fannie A.....	1,000 00	
Roberts, Miss Eliza C.....	1,000 00	
Willing, Edward S.....	1,000 00	
		<hr/>
		\$14,000 00

EPIADIASCOPE FUND.

Palmer, Dr. H. G., Treasurer.....	100 00
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ERSKINE HAZARD DICKSON MEMORIAL FUND.

Dickson, Mrs. Samuel.....	25,000 00
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ERSKINE HAZARD DICKSON MEMORIAL
LIBRARY FUND.

Dickson, Mrs. Samuel.....	2,000 00
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FELLOWSHIP—ALLIANCE FRANCAISE.

Rosengarten, Joseph G.....	300 00
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FELLOWSHIP—ARCHITECTURE.

Henszey, William P.....	1,000 00
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FLANDERS LECTURE FUND.

Paul, J. Rodman, Treasurer.....	1,125 00
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FRAZIER SPECIAL MEDICAL FUND.

Through Dr. Charles H. Frazier.....	850 00
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GENERAL FUND.

American Academy of Political Science.....	\$1,307 82
Converse, John H.....	1,000 00
Dolan, Thomas.....	1,000 00
Field Estate, Eliza W. S. P., Deceased.....	4,719 81
Frazier, George H.....	211 00
Harrison, C. C.....	100 00
Houston, Samuel F.....	100 00
Jeanes, Isaac W.....	500 00
Jones, J. Levering.....	100 00
LeConte, Dr. Robert G.....	100 00

Lewis, Morris J.....	\$100 00	
Lippincott, J. Bertram.....	100 00	
McCullough, Edmund H.....	100 00	
Magee, Horace.....	250 00	
Mask and Wig Club.....	180 00	
Merrick, J. Vaughan.....	100 00	
Mitchell, Dr. S. Weir.....	100 00	
Morgan, Randal.....	100 00	
Paul, Miss Mary W.....	300 00	
Rosengarten, Joseph G.....	100 00	
Several Friends of the University.....	40,000 00	
Sinkler, Dr. Wharton.....	100 00	
Smith, Walter George.....	100 00	
	<hr/>	\$50,768

GYMNASIUM FUND.

Powers, Thomas H.....	1,500
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GYMNASIUM DEFICIENCY FUND.

Burnham, Williams & Co.....	\$250 00	
Coxe, Eckley B., Jr.....	100 00	
Dickson, Samuel.....	250 00	
Houston, Samuel F.....	100 00	
Jones, J. Levering.....	50 00	
Madeira, Louis C., Jr.....	50 00	
Merrick, J. Vaughan.....	100 00	
Morgan, Randal.....	267 00	
Nichols, H. S. P.....	10 00	
Pepper, George Wharton.....	25 00	
Rosengarten, Joseph G.....	268 00	
Wood, Richard.....	5 00	
	<hr/>	1,475

HOUSTON HALL LIBRARY.

Through Mrs. C. C. Harrison, Jr.	710
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INCREASE OF COLLEGE SALARIES.

"Anonymous".....	\$400 00	
Garrett, Mrs. Walter.....	500 00	
Gest, John B.....	250 00	
Harris, Mrs. Mary Powers.....	2,500 00	
Lea, Henry C.....	5,000 00	
Powers, Thomas H.....	1,000 00	
Rosengarten, Miss Fanny.....	500 00	
Rosengarten, Joseph G.....	1,000 00	
Vauclain, Samuel M.....	1,000 00	
	<hr/>	12,150

Treasurer's Report. 257

LAW SCHOOL MONOGRAPH FUND.

Through Dr. William D. Lewis..... \$296 30

LIBRARY, ALUMNI FUND—BIDDLE.

Alumni Law Department..... 1,125 00

LIBRARY—BOTANY.

Pepper, John W..... 125 00

LIBRARY—CURRENT EXPENSE.

Castner, Samuel, Jr.....	\$100 00	
College Alumni.....	50 00	
Dickson, Samuel.....	25 00	
Frazier, W. W.....	11 00	
Rosengarten, Joseph G.....	231 07	
		417 07

LIBRARY—MRS. FRANKLIN.

Rosengarten, Joseph G..... 83 40

LIBRARY—SALARIES ADMINISTRATION.

Rosengarten, Joseph G..... 270 00

MASK AND WIG CLUB.

Mask and Wig Club..... 5,000 00

MEDICAL BULLETIN.

Frazier, George H.....	\$1,500 00	
University Press	500 00	
		2,000 00

NAPLES TABLE.

Hitchcock, Miss F. R. M..... 50 00

NEW MEDICAL LABORATORY APPARATUS.

Woodward, Dr. George..... 2,947 50

NEEDY STUDENTS' AID FUND.

Bonnell, George B.....	\$100 00	
Brown, William A.....	50 00	
Collins, Henry H.....	1,000 00	
Curtis Publishing Co.....	1,000 00	
Harrison, Mrs. George L.....	400 00	

Hering, Walter E.....	\$250 00
Jeffries, J. H.....	125 00
Lewis, Lawrence.....	300 00
Lewis, Henry.....	250 00
Magee, Christopher, Jr.....	160 00
Moore, Samuel, Jr.....	50 00
Rosengarten, Miss Fanny.....	250 00
Rosengarten, Joseph G.....	153 00
Sternberger, Samuel.....	100 00

\$4,188**NEW ENGINEERING DEPARTMENT.**

Allen, W. F.....	\$100 00
Bancroft, John.....	1,000 00
Barney, Charles D. & Co.....	1,000 00
Beaumont, C. O.....	1,000 00
Bell, Samuel, Jr.....	125 00
Bioren, John S.....	100 00
Blabon, Edward L.....	250 00
Boltz, John H.....	250 00
Brill, J. G. Company.....	2,000 00
Brock, Arthur.....	1,000 00
Bromley, Edward.....	500 00
Brooks, James H. A.....	250 00
Bullitt, W. C.....	500 00
Castner, Samuel, Jr.....	1,000 00
Chandler Bros. & Co.....	250 00
Clark, Clarence M.....	500 00
Clark, E. W. & Co.....	1,000 00
Clark, E. W. Jr.....	1,000 00
Clothier, Isaac H.....	500 00
Clyde, B. Frank.....	1,000 00
Colton, S. W., Jr.....	1,000 00
Dannenbaum, Morris.....	100 00
Delany, Charles.....	250 00
Devlin, Thomas.....	1,000 00
Downs, Dr. and Mrs. Norton.....	10,000 00
Drexel, George W. C.....	500 00
Dwight, E. Waterman.....	1,000 00
Ely, Theodore N.....	100 00
Engineers Fraternity Mu Phi Kappa.....	500 00
Fairchild, Mrs. Samuel E.....	350 00
Fleisher, Simon B.....	250 00
Fouse, L. G.....	250 00
Frazier, W. W., Jr.....	500 00

Treasurer's Report.

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Fuguet, Howard.....	\$1,000 00
Gilpin, Charles.....	1,000 00
Graves, Nelson Z.....	500 00
Griscom, C. A.....	2,500 00
Grundy, William H. & Co.....	250 00
Guggenheim, William.....	2,500 00
Hagedorn, Joseph H.....	50 00
Hale, Henry S.....	125 00
Harrison, William W.....	1,000 00
Hendrickson, S. A.....	500 00
Hinchman, Charles S.....	1,000 00
Hipple, Frank K.....	250 00
Jeanes, Henry S.....	200 00
Jones, J. Levering.....	1,000 00
Kohn, Simon I. and Samuel.....	500 00
Kremer & Strubing.....	500 00
Latta, Thomas L.....	500 00
Leas, David P.....	500 00
Lemoine, L. R.....	200 00
Lit Bros.....	500 00
Lit, S. D.....	200 00
Lloyd, Malcom.....	500 00
McCahan, W. J.....	3,000 00
McFadden, George H.....	1,000 00
McFadden, J. Frank.....	250 00
McGlinn, John.....	500 00
McIlhenny John.....	500 00
McNeely, George H.....	1,000 00
McOwen, F.....	1,000 00
Mack, John M.....	1,000 00
Matthieu, John P.....	1,000 00
Merz, Leon.....	50 00
Morgan, George P.....	250 00
Moore, E. J.....	500 00
Morris, John T.....	1,000 00
Naylor, John S.....	125 00
Plumb, Fayette R.....	250 00
Ralph, J. D. H.....	250 00
Riley, Lewis A.....	250 00
Rosengarten, Joseph G.....	1,000 00
Rushton, R. H.....	500 00
Scattergood, Thomas.....	250 00
Schmidt, Edward A.....	1,000 00
Shannon, J. Jacob.....	250 00
Sheafer, Arthur W.....	500 00

Sheafer, Henry.....	\$500 00
State of Pennsylvania.....	30,000 00
Sugar Apparatus Mfg. Co.....	250 00
Sullivan, J., Sons Mfg. Co.....	500 00
Taylor, Hollinshead W.....	300 00
Taylor, Nathan A.....	500 00
Townsend, John W.....	250 00
Voorhees, Theodore.....	250 00
West, Harry F.....	100 00
Wetherill, J. Price.....	2,500 00
Williams, Ellis D.....	250 00
Wolf & Co.....	500 00
Wood, George.....	500 00
Wood, Stuart.....	500 00
Wood, Walter.....	500 00
	<hr/>
	\$97,22

NEW MEDICAL LABORATORY FUND.

Downing, R. W.....	\$1,000 00
Francine, Dr. A. P.....	200 00
Grant, William S.	1,000 00
Griffith Estate, Mary C., Deceased.....	5,000 00
Hancock, E. A.....	500 00
Henszey, William T.....	5,000 00
Horner, Samuel Jr.....	1,000 00
Isman, Felix.....	250 00
Ivins Estate, William, Deceased.....	1,500 00
McManes, Mrs. Catharine.....	12,500 00
Peirce, Harold.....	500 00
Potter, Dr. Thomas C.....	500 00
Rosengarten, Joseph G.....	1,000 00
Wampole, Henry K. & Co.....	250 00
Wilson, Dr. Benjamin B.....	250 00
	<hr/>
	30,45

PRIZE FUNDS.

Delano :	
Delano, Eugene.....	5
Frazier Debate :	
Frazier, William W., Jr.....	10
"J. S. H." :	
Hitchcock, Miss F. R. M.....	7
Spencer Morris :	
Estate of Spencer Morris, Deceased.....	10,21

Treasurer's Report.

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RANDAL MORGAN LABORATORY.

"A Friend to Science".....	\$25,000 00
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SCHOLARSHIPS.

George Barnet :		
Halstead, Mrs. David	\$5,000 00	
Cadwalader :		
Cadwalader, John.....	1,000 00	
Converse :		
Converse, John H.....	5,000 00	
Eckley B. Coxé :		
Coxé, Mrs. Eckley B.....	5,000 00	
Martha Austin McDowell :		
McDowell, J. Austin.....	5,000 00	
	<hr/>	21,000 00

SOMMERVILLE COLLECTION.

Estate of Maxwell Sommerville, Deceased.....	19,364 16
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UNIVERSITY PUBLICATION FUNDS.

Alumni Society	\$100 00	
Burnham, George.....	50 00	
Clark, E. W., Jr.....	100 00	
Colton, S. W., Jr.....	100 00	
Cuyler, Thomas DeWitt.....	100 00	
Duane, James May.....	100 00	
Harris, Joseph S.....	1,000 00	
Jones, Thomas F.....	100 00	
Joyce, William H.....	100 00	
Lea, Henry C.....	100 00	
McFadden, George.....	100 00	
Riebenack, M.....	100 00	
Rosengarten, Joseph G.....	200 00	
Turner, William J.....	100 00	
Wood, Stuart.....	100 00	
	<hr/>	2,450 00

UNIVERSITY VIEW FUND.

Ashbrooke, William S.....	\$25 00
Burroughs, J. H.....	50 00
Church, Arthur L.....	100 00
Clapp, B. Frank	100 00
Harrison, Alfred C.....	100 00
Harrison, C. C.....	100 00
Houston, Samuel F.....	100 00

Jones, J. Levering.....	\$100 00	
Lippincott, J. Bertram.....	100 00	
Perot, Effingham L.....	100 00	
Rosengarten, Joseph G.....	100 00	
Thayer, John B.....	100 00	
Wood, R. Francis.....	100 00	
	<hr/>	\$1,175 00

VETERINARY BUILDING.

Gibson, Miss Juliet.....	10 00
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VETERINARY DEPARTMENT—CURRENT
EXPENSE.

Lippincott, J. Bertram.....	\$1,000 00	
Lippincott, Walter.....	1,000 00	
	<hr/>	2,000 00

VETERINARY FUND—J. B. LIPPINCOTT.

Goodwin, Mrs. J. J.....	100,000 00
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WHARTON SCHOOL.

Wharton, Joseph.....	111,000 00
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WOODS HALL TABLE.

Hitchcock, Miss F. R. M.....	50 00
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DONATIONS TO THE HOSPITAL.

BED FUNDS.

MOULTON H. FORREST BED :

Forrest, Mrs. Emma L.....	\$600 00
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ANNA M. POWERS BED :

Harris, Mrs. Mary Powers.....	300 00
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SABIN WOOLWORTH COLTON 3D, BED :

Colton, S. W., Jr.....	3,000 00
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SINCLAIR TOUSEY BED :

Tousey, Benjamin.....	5,000 00
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MAXWELL SOMMERVILLE BED (PRIVATE ROOM).

Estate of Maxwell Sommerville, Deceased.....	10,191 60	
		\$19,091 60

CHILDREN'S MEDICAL WARD.

Austin, James S.....	\$200 00	
Auxiliary Committee, Ward G.....	200 00	
Crozer, Mrs. George K.....	200 00	
Griffith, Mrs. B.....	200 00	
		800 00

CHILDREN'S ORTHOPEDIC WARD.

Austin, Mr. and Mrs. James S.....	\$200 00	
Collins, Mrs. Henry H.....	200 00	
Conrad, Mrs. Thomas K.....	200 00	
Dickson, Mrs. Samuel.....	450 00	
Harris, Mrs. J. Campbell.....	200 00	
Moulton, Mrs. Byron P.....	200 00	
Page, Mrs. Joseph F., Jr.....	200 00	
Porter, Hon. and Mrs. W. W.....	200 00	
Saturday Club of N. J.....	200 00	
Townsend, Mrs. John W.....	200 00	
		2,250 00

GENERAL FUND.

Baldwin Locomotive Works	\$500 00	
Blanchard, Miss Anna	200 00	
Charity Ball Committee	2,200 00	
City of Philadelphia	375 00	
Henszey, William P.	5,000 00	
Kay Estate, J. Alfred, Deceased.	1,000 00	
McFadden, George H.	2,324 25	
Morris Estate, Sarah P., Deceased.	2,000 00	
Pennsylvania R. R.	248 40	
Smith, Charles.	25 00	
Sommerville Estate, Maxwell, Deceased.	8,959 70	
State of Pennsylvania	55,000 00	
Welsh, Mrs. J. Lowber	150 00	
		<hr/>
		\$77,981

ISOLATION WARD.

State of Pennsylvania.	21,776
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MAINTENANCE PEPPER CLINICAL
LABORATORY.

Through Dr. Alfred Stengel	6,978
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MATERNITY HOSPITAL.

Fields Estate, Eliza W. S. P., Deceased.	\$4,719 81	
Newbold Estate, Mary Scott	5,000 00	
		<hr/>
		9,719

NEW LAUNDRY.

State of Pennsylvania	10,000
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SUN PARLOR.

McFadden, J. Frank	\$500 00	
McFadden, George H.	1,675 75	
Stengel, through Dr. Alfred	594 71	
		<hr/>
		2,770

SUN PARLOR—WARD G.

Auxiliary Committee, Ward G.	\$250 00	
Browning, Mrs. Edward	250 00	
Women's Auxiliary Committee Dept. Surgery..	1,000 00	
		<hr/>
		1,500

WARD CHRONIC DISEASES.

Marshall Estate, Sarah, Deceased.....	\$37,527 00
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X-RAY PLANT.

State of Pennsylvania	17,290 00
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To the Trustees of the University of Pennsylvania.

DEAR SIRS :—We hereby certify that we have audited the accounts of the University of Pennsylvania for the fiscal year ended 31st August, 1905, and found them to be correct and carefully kept. The foregoing report of the Treasurer is in accordance with the books, and the schedule of securities therein agrees with the securities which were on hand 31st August, 1905.

Respectfully yours,

[Signed]

LYBRAND, ROSS BROS. & MONTGOMERY,
Certified Public Accountants.

7th February, 1906.

REPORT OF THE ASSISTANT TREASURER OF THE DEPARTMENT OF ARCHÆOLOGY.

FOR YEAR ENDING AUGUST 31ST, 1905.

RECEIPTS :

Balance, August 31, 1904.....		\$6,945
Annual Dues		3,945
General Fund :		
Donations :		
Samuel F. Houston ...	\$1,000 00	
Calvin Wells.....	1,250 00	
Thomas Dolan.....	1,000 00	
Mrs. Lucy Wharton Drexel	1,000 00	
John Wanamaker	1,000 00	
Samuel T. Bodine.....	1,500 00	
John H. Converse.....	1,000 00	
Eckley B. Coxe, Jr.....	1,500 00	
Justice C. Strawbridge.....	500 00	
E. W. Clark	500 00	
Dr. William Henry Furness, 3rd	1,080 00	
Bernard N. Farren	50 00	
James F. Sullivan.....	100 00	
	<hr/>	11,480
Income from Endowment Fund :		
University of Pennsylvania Endowment		
Fund.....	\$2,223 75	
Interest, Mt. Washington Street Railway		
Co. Bonds.....	100 00	
Interest, New Mexico Railway and Coal		
Co. Bonds.....	250 00	
Interest, Seacoast Railway Co. of New		
Jersey Bonds.....	250 00	
	<hr/>	2,823
Egyptian and Mediterranean Fund :		
Donations :		
Mrs. John Harrison	\$100 00	
John Wanamaker	3,400 00	
E. B. Coxe, Jr.	500 00	
Interest	6 37	
	<hr/>	4,006
American Exploration Society :		
Donations :		
Calvin Wells.....	\$500 00	
Interest.....	93	
	<hr/>	500

Department of Archaeology

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Building Fund :

Interest	\$17 82
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General Ethnology Fund :

Donations :

Mrs. Lucy Wharton Drexel.....	\$1,450 00
Samuel T. Bodine.....	500 00
Eckley B. Cox, Jr.....	500 00
Dr. and Mrs. George B. Woodward...	1,000 00
Mrs. Charles W. Henry	1,000 00
Samuel F. Houston	1,000 00
William R. Philler.....	5 00
Fisher Corlies Morgan.....	10 00
Interest.....	6 15

5,471 15

Prize Essay Fund :

Donations :

George B. Bonnell.....	\$20 00
H. G. Ward	20 00
John B. Gest.....	20 00
Miss E. C. Roberts.....	10 00
Dr. Charles W. Burr.....	5 00
Miss Emily Lehman.....	5 00
Mrs. C. A. Griscom	5 00
C. A. Griscom, Jr.....	5 00
Miss Frances Clark	10 00
Miss M. A. Burnham.....	25 00
W. B. Whitney.....	5 00
Mrs. Jones Wister.....	5 00
S. P. Avery, Jr.....	10 00
Miss Clara Comegys.....	5 00
Mrs. Randall Morgan	25 00
George C. Boldt	10 00
Henry C. Lea.....	20 00
Miss Sallie Sharpe	5 00
W. W. Justice	5 00
Mrs. Lucy Wharton Drexel.....	50 00
Dr. C. H. Thomas	5 00
Mrs. G. M. Conarroe.....	15 00
Robert C. Ogden.....	20 00
Miss Bertha Babbitt	5 00
Mrs. G. B. Roberts.....	\$10 00
John T. Morris.....	10 00
George F. Edmunds.....	10 00
James Barr Ames	10 00
George C. Thomas.....	10 00
Interest	50

360 50

Babylonian Fund, Nippur :

Donations :

C. C. Harrison.....	\$250 00
Samuel T. Bodine.....	250 00
Clarence H. Clark.....	250 00
George C. Thomas.....	125 00
Samuel F. Houston.....	125 00
Joseph S. Clark.....	50 00
E. W. Clark, Jr.....	50 00
C. M. Clark.....	50 00
H. L. Clark.....	50 00
Percy H. Clark.....	50 00
Interest.....	6 22

\$1,256 22**Babylonian Publication Fund :**

Sale of Publications.....	\$52 26
Interest.....	42

52 68**C. Hartman Kuhn Fund, Interest.....****24****Carl Edelheim Excavation Fund, Interest.....****52 69****Endowment Fund, Life Membership.....****100 00****Lucy Wharton Drexel Medal Fund, Interest....****52 37****Dillwyn Parrish Collection Fund, Interest.....****32 20****Boyd Publication :**

Donations :

Mrs. Samuel F. Houston.....	\$100 00
Calvin Wells.....	100 00

200 00**General Fund :**

Sale of Slides and Photographs.....	\$17 35
Sale of Publications.....	87 47
Refunds.....	133 42
U. of Pa., Prop. of Bal. in A. A. A. S. Fund..	50 00
Receptions.....	46 49
Interest on Deposits.....	58 74

393 47

\$37,691 22

DISBURSEMENTS.**General Fund :**

Printing Publications.....	\$709 80
Supplies and Expenses.....	3,909 12
Lecture Fees.....	242 00
Repairs.....	108 76
Coal.....	1,275 92
Telephones.....	239 27
Salaries.....	13,704 56

\$20,189 43

Department of Archaeology

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American Exploration Society	524 82
Egypt and Mediterranean Fund	3,900 00
Building Fund.....	174 82
General Ethnology Fund	6,394 17
Prize Essay Fund	389 40
Babylonian Fund, Nippur.....	1,081 36
Dillwyn Parrish Collection Fund.....	150 00
Boyd Publication Fund.....	200 00
Lucy Wharton Drexel Medal Fund.....	6 00
Balances, August 31, 1905 :	
General Fund.....	\$225 12
American Exploration Society	43 49
Egypt and Mediterranean Fund	323 67
General Ethnology Fund	27 41
Building Fund	775 96
Babylonian Fund, Nippur.....	352 86
Babylonian Publication Fund.....	52 68
C. Hartman Kuhn Fund.....	12 70
Carl Edelheim Excavation Fund	174 34
Endowment Fund.....	1,017 52
Lucy Wharton Drexel Medal Fund.....	91 69
Dillwyn Parrish Collection Fund.....	1,590 68
	<hr/>
	4,688 12
Deficit :	
Prize Essay Fund	6 90
	<hr/>
	\$4,681 22
	<hr/>
	\$37,691 22
	<hr/>

Respectfully submitted,

JANE M. McHUGH,
Assistant Treasurer.

We hereby certify that we have audited the accounts of the Department of Archaeology of the University of Pennsylvania for the year ended 31st August, 1905, and found them to be correct, and the securities and cash on deposit were found to be in accordance with the books. The foregoing report of the Treasurer was found to agree with the books of account.

[Signed]

LYBRAND, ROSS BROS. & MONTGOMERY,
Certified Public Accountants.

PHILADELPHIA,
5th December, 1905.

405620

THE UNIVERSITY BULLETIN

SEVENTH SERIES: No. 3—PART 6

University of Pennsylvania

THE PROVOST'S REPORT

FOR THE YEAR ENDING

AUGUST 31, 1906



Founded 1740

PHILADELPHIA
PUBLISHED BY THE UNIVERSITY
FEBRUARY, 1907
Bi-Monthly

Entered at the Philadelphia, Pa., Post-Office as Second-Class matter



UNIVERSITY OF PENNSYLVANIA

ANNUAL REPORT

OF

THE PROVOST

TO THE

BOARD OF TRUSTEES

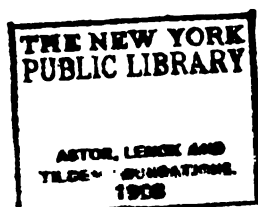
FROM

SEPTEMBER 1, 1905, TO SEPTEMBER 1, 1906

PHILADELPHIA

PRINTED FOR THE UNIVERSITY
1907.

C. W. H.



Press of
THE JOHN C. WINSTON CO.
Philadelphia, Pa.

REPORT OF THE PROVOST

To the Trustees of the University of Pennsylvania:

GENTLEMEN: It is my desire, as well as my pleasant duty, to make a statement to you of the work of the University during the academic year which ended August 31, 1906, abstracting, so far as this part of the recital is concerned, the reports of the Deans of the several Departments. I wish, also, to refer to some of the principal events in our University year, and to call your attention as well to our present condition.

Every Report makes those of us who are still working for the University conscious of the changes which take place so frequently, and which in so large a number as our University Body now is, constantly occur. We must meet our losses, whether by death or by other removal, with fortitude, and accept the restoration of these losses with gratitude.

In my last Report, record was made of the death of our then Senior Trustee, Mr. William Sellers. In this Report, I record the death of him who succeeded Mr. Sellers to the senior place upon our Board, Mr. John Vaughan Merrick. Mr. Merrick was born in 1828, was chosen a Trustee in 1870, and died upon March 28, 1906. In recognition of his scientific attainments, your Board voted to confer upon him the honorary degree of Doctor of Science upon University Day, February 22, 1906, but Mr. Merrick was too ill

to be present, and the degree was conferred in absentia. The academic Hood and Diploma were taken to his bedside; but he was then very, very ill—almost unconscious. The action of the Board, so unexpected by him, having been communicated to him before his illness, gave him great happiness. Through the kindness of his children, both the Diploma and his portrait by Vonnoh, have been hung upon the walls of the new building for the Engineering Departments.

The following is the Minute of the Board in reference to Mr. Merrick:

“John Vaughan Merrick, who served as a Trustee of the University since 1874, died on March 28, 1906. Born in Philadelphia on August 30, 1828, his life was an unbroken career of useful work and an example and an inspiration. His services as an engineer were highly beneficial to the City, to the State, and to the United States. His death removes an influence in the administration of the University which has ever been powerful for good. His loyalty and interest were constantly employed for the progress and development of the University. He gave generously of his private means, but with even greater generosity he gave his valuable time and service, and for many years the University has benefited by his wise and prudent counsel.

“As a citizen he was honored by all,—as a man he was loved and admired by many. To his suggestions the University is greatly indebted for the complete equipment of its Mechanical and Engineering Departments. The Light, Heat and Power Station is one of his most successful undertakings. The plan

of the new Engineering Building will long be a memorial of his able and painstaking work. His knowledge and experience of the requirements of civil and mechanical engineering were put freely at the service of the University. Not only in this one department did the University benefit by his wise counsel, and generous help, and sound advice. In every branch of University life and work he showed a lively and intelligent interest. His loss will be deeply felt by the Provost and by the Trustees, by the Faculty and by the students, with and for whom he worked faithfully, and by whom his memory will be affectionately cherished and honored.

"What he was to the University he was to other institutions and charities with which he was connected. The Roxborough Hospital owed its existence to his initiative, and its growing usefulness to his generous gifts, his watchful care and his helpful interest. Singularly modest and gentle in demeanor, Mr. Merrick earned by his life-long labors for others a high and enduring place in the roll of men who have devoted their lives to real public benefaction, and the Trustees of the University sorrowfully join in this expression of their deep sense of his loss to the University."

The three places vacant in the Corporation—the Trustees of the University of Pennsylvania—through the retirement of Mr. Frazier, noted in last year's Report, and the deaths of Mr. Sellers and Mr. Merrick, have been filled by the election of Mr. J. B. Townsend, Jr., '82 College, '84 Law; of Mr. George H. Frazier, '87 College, and of Mr. Henry G. Ward, of the Class of '70 College. Mr. Ward was elected upon the nomination of the Central Committee

of the Alumni, which, to-day, under the resolution of the Corporation, nominates for every third vacancy. The election of Mr. Ward, a resident of New York City, marks a cosmopolitan action, never before taken, and one significant of the fact that the influence of the University belongs to all parts of the world and is not limited by place or country. Prior to the election of Mr. Ward, all of our Trustees have had their legal residence in the State of Pennsylvania. As future vacancies take place, will it not be wise to consider the choice, from time to time, of other representative University men residing beyond our own State, who will be equally interested in the University and will also have the power of influence for her cause.

The death of General Isaac J. Wistar is noteworthy in our history. Although in his 79th year, he had continued a sustained, daily and minute interest in the work and advancement of the Wistar Institute of Anatomy until his last illness—as well as in other Departments of the University. He is indeed a figure of the past; a figure not likely to appear again in our country, which no longer has a frontier. Although positive in manner, he had the heart of a child. He was upright and honorable and modest. Although he was the sole patron of the Wistar Institute, supporting it during life and by will to the extent of almost his entire fortune, General Wistar was always unwilling to take any position in administration, except that of Secretary to his colleagues and fellow Managers. In the Report of the Director of the Institute will be found the full and beautiful Minute of tribute of the Board of Managers in memory of their friend and Founder.

The example of General Wistar may well be referred here in one especial relation. His great desire was to advance the Science of Anatomy for the welfare and relief of his fellowmen. He had sustained the shock of the loss of his beloved wife, and they were without children. He then determined to do the utmost in his power for the advancement of the particular scientific subject to which he had devoted his thoughts, and which appealed so nearly to his intellect and to his affections. During his life General Wistar made an absolute disposition of four-fifths of his estate for the advancement of knowledge, through the Wistar Institute, retaining only the remaining fraction for his personal use, and disregarding all contingencies of fortune; and this fraction he left by will to the Institute, reserving only a few bequests. I wish I might publish in full a personal note of encouragement and suggestion which he wrote me some months ago, and which I have always kept ready in my hand. Later I will give the substance of a few sentences. The example of his life is not hard to read. It opened that his family obligations were such as to permit him justly to do as he would with his property, and he gave that he had to science. But he understood of himself that which so many are ready and willing to understand, if the subject can but be put before them and explained, as to men and women of public spirit and of willingness to render public service. It was this that he understood—that the advancement of knowledge and its teaching, whether in literature or in Science, are of fundamental importance to the world; but that it is a money-losing work—only to be made possible by those who are in a position fairly to share

in this support, and who have their interests of so many kinds in the community. He knew that the Science of Anatomy might not be advanced at Pennsylvania, and he resolved to be responsible for it, and so he became its benefactor. He knew that Chemistry and Physics and Engineering are uncovering and developing the resources and creating the wealth of the country, and he knew, too, that no one of these subjects was self-supporting. He knew that the Libraries and Laboratories and the Museums of the University might help to make beautiful and interesting the life of every man and woman, and that each man and woman must always be his own best self-companion, and he asked how is all this manifold work to be supported. The answer certainly must be, not that we are to give to the extent of General Wistar's benefactions, but that there should be no one in any community, who, being able, should not give something, every year, toward the fostering of the work of the University; a charity not only in the eyes of the law, but the greatest charity in point of fact; for to the University every subject of human interest is close and dear. This Report may rest obscure, as is the fate of most Reports, until in future years the history of the University shall be again written; but if the Public Press might tell the story of General Wistar's dedication of his estate, and repeat to ears ready to hear what might be done if all would help according to their means, and the reason of the obligation, Pennsylvania, as well as our Sister Universities, would owe an additional debt of gratitude. In his letter to me, of which I have spoken, occurs this sentence: "Teaching professors are to-day the worst paid of any intellectual employees.

They ought to constitute a social as well as an intellectual center ; but they cannot do it upon their present salaries. All of us must keep in mind these facts, and ponder how soon, and how, they can be cured? Probably by special endowments of Chairs? That at least will help."

Your Board will recollect the earnest talk we had together upon this subject at our December stated meeting.

We have had other losses by death in addition to those of Mr. Merrick and General Wistar. During the year under review, Mr. Joseph E. Gillingham died. Mr. Gillingham was one of the original founders of the Department of Veterinary Medicine, and was, at the time of his death, President of the Board of Managers of the Veterinary Hospital. This Department of the University was remembered by Mr. Gillingham in his will,—the sum of \$50,000 having been bequeathed therein to the Veterinary School, without limitation as to its use, and conditioned only upon the erection of certain buildings for the use of the Department within three years from the date of his death. Contracts have already been executed, as will later appear, for the new buildings, and within the limit of time, the Trustees will receive the amount designated by Mr. Gillingham, whose interest from the very beginning was a sustained interest in this particular and very important University work.

I wish to record also, with feelings of deep sorrow, the death of Mr. George Tucker Bispham, of the Class of 1858 College. It is true that, on account of failing health, after twenty-two years of service in the Law Department, as Professor of Equity Jurisprudence, Mr. Bispham had

sent his resignation, to take effect upon August 31, 1906. But Mr. Bispham died, at Newport, Rhode Island, upon July 28th,—so that he was still in the service of the University at the time of his death. He rendered many years of enlightened, able and faithful service, and the University will be always under an obligation to his memory, and will always recollect what he did to make eminent the Department of Law.

Two very important members of the University Body have left us during the year, with our interest and good will, to accept advanced positions. I refer to Dr. M. G. Brumbaugh and to Mr. E. W. Mumford.

Dr. Brumbaugh had been for ten years Professor of Pedagogy, and resigned to accept the high position of Superintendent of Schools of Philadelphia. While our first thought might be that the University's loss is the city's gain, our second thought will be that both the University and the city will profit by the selection of the most fit man in the State of Pennsylvania to be the Superintendent of Schools of the City of Philadelphia. That Dr. Brumbaugh will always continue actively interested in the University we may be sure.

Mr. E. W. Mumford resigned on the 30th of June from his office as Bursar, for the purpose of accepting a favorable business position which had been offered to him. For many years he served the University, faithfully, with ability, with efficiency and with devotion, rarely taking a vacation even in the Mid-summer Recess. He organized and created his department and made it one of the utmost accuracy. Mr. Mumford has voluntarily offered to render

any service within his power, whenever he may be called upon.

The position made vacant by the retirement of Professor Brumbaugh has been filled by the election of Dr. A. D. Yocum. Dr. Yocum earned his Degree of Ph.D. at this University in 1900, and since that time has been Superintendent of Schools of the City of Chester, Pa. He has been appointed Assistant Professor of Pedagogy, and will, I doubt not, in due time deserve promotion.

Mr. Mumford's place, as Bursar, has been filled by the election of Mr. W. O. Miller, of the Class of 1904 College, and Mr. Miller has taken up, with energy and intelligence, the large work inherited from Mr. Mumford.

Professor Bates, who was given a year's leave of absence in order that he might accept an appointment in the American School of Classical Studies at Athens, has returned, having been Director of that School while on leave. The University was enabled to make the financial arrangement in favor of Professor Bates through the generosity of Mr. Robert C. H. Brock. Mr. Brock was particularly interested in the American School of Classical Studies at Athens, and was the benefactor of the University in this relation,—as he had so often been a benefactor before, when called upon. The death of Mr. Brock before the return of Professor Bates was a sad ending and a peculiar disappointment to all of us, for we had arranged to make a report to Mr. Brock, as to the work which he had enabled the University to do.

Professor Rowe is now in South America, with the permission of the University, and will return at the begin-

ning of the next academic year. He was appointed by the United States Government a member of the Pan-American Commission which recently met in Rio de Janeiro, and he will use the remainder of his time in studying the political institutions of the South American Republics and in visiting the universities of that continent. Through Dr. Rowe's visit, and through the resulting correspondence, the University of Pennsylvania will undoubtedly be brought into close relationships with her sister institutions of learning in South America, and the public work which they and which we are doing will be fostered and enriched by mutual co-operation and sympathy.

As is always the case, there have been a number of changes by way of promotion, by way of appointment, and through retirement. The report of each one of the Deans gives in detail these facts, so far as his own Department is concerned, and they will be found summarized in one of the appendices under the title "Personal Changes."

There has been a large increase in the number of our student body, not only this year, but during the past five years. The total registration in all Departments, as stated in the comparative registration figures for November, 1906, published in "Science," is as follows:

1902	2,549
1903	2,644
1904	3,027
1905	3,430
1906	3,934

and these statistics, according to the author of the article from which this statement is made, show that not only

during the last year has the University of Pennsylvania enjoyed the largest percentage of gain in registration of any University in the United States; but that this is the fact for the past five years; *i. e.*, within five years, we have increased our student numbers by quite fifty per cent, and in the last year, by about fourteen per cent, and there appears to be no other institution of learning which at all or nearly makes this student record. It seems to me that we have especial cause for happiness at this extraordinary result of our work,—our work to encourage and help the several Faculties and our work together as Trustees,—for it is well known that the standards of entrance requirements and of the courses leading to our Degrees have been constantly raised. It is more difficult now to enter the University, and more difficult to get out of it with a Degree, than ever before.

I feel that the causes are to be sought and will be found in the generosity of the community, which has enabled the Trustees to make a distinct advance every year, in better opportunities for teaching and in provision for investigation. The new buildings and laboratories for the several Departments and their equipment express the former, and the bibliography of each year is the witness of the latter. To use the recent words of one of our Trustees, "The new buildings which have been erected constitute a notable group—noble and dignified in architecture, complete in equipment, and perfectly adapted to the uses for which they were designed."

I need not refer again to the devoted work of the members of our Teaching Body,—that I have spoken of in

every Report; nor to the loyalty to Pennsylvania of our alumni and undergraduates; that rises every year, with the rise of the University itself;—but I do desire to refer to what has already been spoken of: that one of the chief reasons for our growth and the chief cause for congratulation is to be found in the “perfect accord and harmony which prevail among all enlisted in the common cause,—trustees, faculties, students and graduates,—all are moved with a single impulse and all are working to one end.”

In the last academic year there were three noteworthy days, two of general importance, and one personal to myself. On February 22, 1906, Dr. Henry van Dyke delivered the University Day Oration, his subject being “The Men Who Stood with Washington.” The charm of manner and the exquisite diction of the Orator were only excelled by his noble words of inspiration and call to duty. When an Honorary Degree, a few years ago, was conferred upon one of our national scholars, the words were used that he had set to himself the task of gilding refined gold and had succeeded in the attempt. The same words may be transferred to the Oration of Dr. van Dyke.

On the 19th of April, the bi-centennial of the birth of Benjamin Franklin was observed under the auspices of the American Philosophical Society, and the University of Pennsylvania were the hosts of the morning and had charge of the proceedings in the Academy of Music. Many Honorary Degrees were conferred, upon men of letters and upon men of science, from many parts of the world. The Oration was delivered by the Attorney General of the Common-

wealth of Pennsylvania. Amongst those who became an honorary alumnus of the University upon that day was His Majesty Edward VII, King of England and Emperor of India, who was represented by the person of his Ambassador.

That day, however, in the year which will always be the day of days to me and to all of my household, so far as my University work is concerned, is the 23d of May,—for you were good enough then to invite me to dine with you—and with many others—and to receive from you words of encouragement, and over-generous expressions at my work, together with you, during the last ten years. The exquisite service of silver which your Board presented to me, and the warm affection which marked our evening together, and which has been expressed in the published volume of that eventful occasion, will never be forgotten by myself or my children's children. What had troubled me before the dinner was that where there had been so much to do, I had been able to do so little, and what has made me over-anxious since the 23d of May has been that, notwithstanding the good will and support and kindness of every member of the Board toward me, with the great growth of the University, I may be unable, in mind or body, fairly to fulfil its manifold duties and responsibilities. I can only ask for health and strength and to continue to be surrounded by the same trust and confidence which have been my daily support during the last ten years.

For your information, there is here presented the classified statement of Professors, Lecturers and Instructors; and of the Student Body, sub-divided as to their several

Departments, and, also, a table giving the geographical distribution of the latter for the year 1905-06:

PROFESSORS, LECTURERS, AND INSTRUCTORS.

	1904-05.	1905-06.
The College	131	142
Department of Philosophy	60	65
Department of Law	18	16
Department of Medicine	129	137
Department of Dentistry	46	49
Department of Veterinary Medicine	24	26
Emeritus Professors	3	3
	<hr/>	<hr/>
	411	438
Duplications	86	91
	<hr/>	<hr/>
Totals	325	347

STUDENTS.

	1904-05.	1905-06.
The College	1,490	2,024
Department of Philosophy	213	298
Department of Law	303	322
Department of Medicine	546	592
Department of Dentistry	359	330
Department of Veterinary Medicine	79	105
	<hr/>	<hr/>
	2,990	3,671
Duplications	15	113
	<hr/>	<hr/>
Totals	2,975	3,558

GEOGRAPHICAL SUMMARY OF STUDENTS.

Alabama	13	California	7	Dist of Columbia..	24
Arkansas	4	Canada	7	England	10
Australia	14	Chile	3	Florida	7
Austria	5	China	1	France	15
Belgium	1	Colorado	8	Georgia	8
Brazil	6	Connecticut	38	Germany	6
British Columbia ..	1	Costa Rica	3	Hayti	1
Brit. West Indies..	5	Cuba	7	Hawaiian Islands..	1
Bulgaria	1	Delaware	50	Holland	1

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Honduras	1	Nebraska	2	South Carolina ...	6
Idaho	3	New Hampshire ..	14	South Dakota	3
Illinois	16	New Jersey	262	Sweden	1
India	1	New Mexico	1	Syria	1
Indiana	13	New York	134	Tennessee	2
Iowa	13	New Zealand	7	Texas	15
Italy	4	Nicaragua	5	Turkey	1
Japan	11	North Carolina ...	8	Utah	3
Kansas	8	North Dakota	1	Vermont	4
Kentucky	28	Ohio	57	Virginia	17
Louisiana	2	Oklahoma Ter. ...	1	Washington	12
Maine	12	Oregon	2	West Virginia	16
Maryland	44	Panama	4	Wisconsin.....	7
Massachusetts ...	65	Pennsylvania ...	2,562		
Mexico	3	Philippine Islands.	2		3,671
Michigan	8	Porto Rico	2	Duplications	113
Minnesota	11	P. E. Islands	1		
Mississippi	3	Rhode Island	7	Total	3,558
Missouri	9	Roumania	1		
Montana	1	Russia	7		

The growth of the College Department continues, and this growth is most notable in the Scientific School and in the Wharton School. It is less marked, here and elsewhere, in what is now known, with us, as the Arts and Science Course, requiring Greek and Latin, and leading to the Degree of Bachelor of Arts; but the students themselves have formed an Arts and Science Association, with the purpose not only of mutual intercourse and interest in their chosen subjects, but to influence young men, intending to go to College, to take the Arts Course.

It would be well if the A.B. Degree were to mean the same thing at every College and University. At present it means one group of subjects at one University, and an

entirely distinct group at another University. It is awarded, therefore, according to the individual and separate views of different Universities and Colleges,—and, in point of fact, a chart of studies taken is practically required with every Bachelor of Arts Diploma. Courses with us which lead to the Degree of B.S., lead in many other places to the Degree of B.A. Our College Faculty has always felt that both Greek and Latin are to be required for at least part of the four years, including previous School preparation in both of these languages, in the case of all those intending to work for the A.B. Degree.

Through the generosity of a member of the Class of 1891 (Mr. Thomas Harris Powers) College Hall has been entirely renewed and restored to freshness and good condition. A large sum of money subscribed by Mr. Powers for this special purpose has been expended, not only upon the painting and general betterment of the interior of the building, but upon the sanitary arrangements and ventilation as well, and it has never been as wholesome and cleanly and proper as it is to-day.

The opening of the new building for the Engineering Departments has enabled us to devote all of College Hall to cultural College subjects, with the exception of the third floor, which is still used by the Department of Architecture; but the School of Architecture is growing so rapidly, and the number of students now in their class-rooms in this building is so large, that within a year or two we will not be able here to provide for our student body, if these conditions continue.

As the Dean of the College says, several Departments

are now in great need of additional rooms, which, unfortunately, cannot be assigned them, as there are none available. Of course, it is our earnest hope that the College in all of its sub-divisions, the College of Arts, the Scientific School and the Wharton School, will continue to grow and to attract students, upon merit, from far and near; but we shall have to make provision very soon, and in many ways, if our increase continues to be as healthy and vigorous for the next five years as has been the case for the past five years.

No one can read the reports of the Deans of the Professional Schools without being gratified with the large percentage of those entering the Professional Schools who hold College Degrees; and our College Department must be more and more the feeder of our Professional Schools; and this will necessarily be the case to a larger percentage as the requirements for admission to the Medical and the Law Departments, etc., etc., are raised. In his report this year, the Dean of the Law Department states that eighty-one per cent of the First Year class either hold College Degrees, or had been for one, two or three years in a College of good standing; and the Dean of the Department of Medicine reports that sixty per cent of the First Year class were young men who either held College Degrees or had been members for one, two or three years of a College of good standing. These averages will necessarily rise with the higher requirements for admission to the Professional Schools. We must, therefore, now, to a greater degree than ever before, consider the College as the foundation of our University work.

During the summer of 1906, the third annual Summer School held its session. We began in 1904, with 137 students; in 1905, with 212 students, and in 1906 there was the gratifying increase of a total of 275 students. Of these, 169 were men and 106 were women. They came to us from about thirty different States and countries. The gain in students in 1906 as compared with our beginning in 1904 is a little more than 100 per cent. We may, then, consider the Summer School a fixed part of our University work; and I believe that an increasing number of those who attend the Summer School Courses will be encouraged and enabled to enter the Graduate School and work for an advanced Degree. Preliminary arrangements have already been made, under the active co-operation of the Director of the School, Dr. Quinn, for a fourth session in Mid-summer of 1907.

So far as the College is concerned, the principal event of the year has been, as we all know, the completion of the new building for the Departments of Mechanical, Electrical and Civil Engineering. This undertaking is a notable University public contribution;—for those who are in a position to know tell us that we have the best equipped and the most important Engineering Building as yet erected, furnished with every convenience and facility for the student in engineering to pursue his studies. This noble piece of work will not only fulfil its direct purpose in training educated engineers, but it will undoubtedly render mis-

sionary service to the entire University. The engineering and technical journals of the United States and other countries have given so much illustrated space, and have spoken in such words of commendation as to the results of the work of your Board in making this special provision, that "Engineering at Pennsylvania" is already known all over the world. The correspondence, too, of the University has been greatly increased, not only with reference to this particular subject, but the general University correspondence, from this country and from abroad, has materially enlarged since the dedication of the new Engineering Building.

Two questions, which are of primal importance to our College work, have, after many months of deliberation, been finally settled by the Corporation, upon the recommendation of the College Faculty. I will make mention first of the "College Courses for Teachers." Since 1892, upon Friday evening and upon Saturday morning, we have been giving to teachers, both men and women, courses similar in character and scope to those in the Course in Arts. These courses, including quite twenty subjects, have been well attended and have been most helpful to their auditors, but they were not continued to a sufficient number of units to lead to a degree, and while the student had the benefit of the instruction, there was no University recognition of the work done, nor any recognition which would permit such student to proceed to work in the Graduate School. Beginning with the second term of this academic year, arrangements have been made—and the announcement has already been made—that courses leading to the Baccalaureate Degree, given

at convenient hours, separate and apart from those taken by undergraduate students, will be open to all teachers and other persons fully qualified to become candidates, either for the Degree of Bachelor of Science or Bachelor of Arts. We look forward to this new work amongst the several thousand teachers of Philadelphia and vicinity and others with the greatest interest, feeling that the University may be most helpful to them and to all who come under their influence. I wish to speak in moderate terms as to the value of these new arrangements; but, nevertheless, I believe them to comprehend a great educational movement and one which in its results will bear the richest fruit of public service. I know of nothing which the University has of late done which has so filled with enthusiasm and pleasure the members of the College Faculty who will conduct these "College Courses for Teachers."

The other question which has now been settled, and which for a number of years has given us great concern, is that of the terms of admission to College. In some places it has been wholly by examination, or presumably so; in other places, entirely by certificate. Hereafter, admission to the College of the University of Pennsylvania will be upon School Records, so far as these Records will entitle each candidate to be admitted without examination, or so far as they will show in what subject or subjects he will be required to take an examination. The Dean of the College states the matter in the following words; and so that the subject may be completely understood wherever this Report may go, I will quote verbatim the views of the College Faculty, as expressed by the Dean:

"For a number of years we have accepted the diplomas of public high schools for such entrance subjects as, in the opinion of our Committee on Schools, they properly covered, provided the marks or grades were satisfactory to our Committee. The students who have been admitted to college by this method have proved as a class entirely satisfactory. They have done their work well and have maintained excellent standing. There has seemed to us no reason for making any change in our regulations governing the acceptance of public high school diplomas, inasmuch as the results were perfectly satisfactory. The difficulty has been with the non-acceptance of records made at private schools, which has resulted in an apparent discrimination against private schools in favor of public schools. Many of the ablest schoolmasters in the country, men of large experience, are in favor of the admission of students to college without examination, making the real test the ability to do college work. After careful consideration and investigation, the University has decided to announce a change in its regulations, to take effect in June, 1907. The announcement, which will appear in the forthcoming catalogue, is as follows:

ADMISSION TO COLLEGE ON SCHOOL RECORDS.

"The University has determined upon an important change in its regulations hitherto governing the admission of students to the Freshman Class in the College.

"In the case of every candidate for admission from a private preparatory school, or from a public high school, there may hereafter be submitted to

the Dean of the College a statement certified by the Principal or Head-Master of the School, giving such information as may be required regarding his course of study, including in this information his marks or grades in each subject for at least the last two years in school.

"In each case, the statement will be referred to a special Committee of the Faculty, which will pass upon every application, and will determine whether or not the candidate shall be admitted without examination, and if not, in what subject or subjects he will be required to take an examination.

"THIS REGULATION WILL GO INTO EFFECT IN JUNE, 1907. A special circular will be issued about March 1, 1907, giving full information as to details."

"You will notice that the records of the student for at least the last two years must be submitted, and that the principal of the school is asked simply for a transcript of the actual record of the boy. The University Committee will examine these records carefully and decide what examinations will be required. Inasmuch as the principal of the school is not asked to certify that in his opinion the boy is prepared for college, but is asked to give the marks for two years, the entire burden of deciding what examinations may be remitted is assumed by the University. While no system of entrance regulations is perfect, not even examinations, we believe that the present plan is open to as few objections as any."

Entrance to College being, therefore, soon to be upon the basis of School Records, the preparatory schools will surely not only be most careful in the grading of their

pupils, but the students themselves will be incited to greater diligence and patient effort to obtain marks and gradings which will enable them to enter College with as few examinations as possible.

The report of the University Librarian tells not only that there has been a steady and systematic use of the Library, but that there has been an increase of quite one-fifth in the number of books circulated during the year, as compared with the previous University year. The accessions to the general Library and to the Biddle Law Library show a total of nearly 14,000 volumes. The large increase in the Library of the Department of Law is due to the gift by the daughters of the late Mr. Richard C. McMurtrie (LL.D., Penn'a, 1892), of his law library. This collection numbers nearly 3,000 volumes, and will further insure, in a most beneficent way, the memory of the great legal scholar, whose name is already associated with the new Law School Building in that one of the reading-rooms—the Graduate Reading-Room—known as “McMurtrie Hall.” The portrait of Mr. McMurtrie hangs upon its walls.

When it is understood that there were more than 45,000 student visits recorded at the inner room of the General Library Building during the academic year under review,—a number both as to those in attendance during the day and as to those in attendance during the evening hours, much greater than ever before,—we may comprehend how vital the Library has become, not only to the members of the several Faculties, but to the student body, increasing so rapidly in number. One of the most refreshing and inter-

esting visits is to step into this Library Building, either by day or by night, and to see for oneself the large number of students and teachers who are constantly using it.

The general Library of the University, however, carries with it one of our great financial responsibilities and anxieties. It is practically without endowment. The extraordinary additions to it have been secured by such annual gifts, either in money or in collections, as we have been enabled to provide, from year to year. The Librarian refers to some of those who have shared in this responsibility, but it does not seem right that we should be obliged to rely wholly upon the annual gifts of the Chairman of the Committee and of his associates. Important as have been the increases to the collections, and valuable as these increases have been, because they are the accessions chosen by scholars, the daily and natural needs for consultation and for reference and for general use, have not nearly been supplied. The Librarian is constantly receiving—and I am constantly receiving—earnest requests for additions which it is quite out of our power entirely or nearly to grant. Very earnestly is made, in the report of the Librarian, an appeal for a Library endowment fund. The Trustees of the University of Pennsylvania should certainly have a fund the income of which would go a long way to supply in abundance the special libraries and individual books required for literary and scientific investigation and for study. I wish, indeed, that some one, in the immediate future, would do for the Library what has been done for the Wistar Institute. There could be no more fruitful benefaction.

I need not recall to your notice the withdrawal of Miss

Randall as Assistant Librarian, after long and faithful service. Miss Randall's resignation came to us on account of her marriage; and in her place, Miss Leiper, who has been with us for a number of years, has been selected.

The Hospital of the University continues its beneficent and charitable work, and to an increasing extent. We may form some general conception of the measure of this charity when we see that the annual cost of maintenance now exceeds \$200,000. The number of Hospital Days is much larger than ever hitherto. Several beds have been endowed; additions to the capital account of this one of our trusts is steadily, even if but slowly, increasing, and the management of the Hospital under the ceaseless supervision of its Executive Committee improves in economy, in efficiency, and in the amount of service rendered.

The President of the Board of Managers of the Hospital refers to the change authorized by the Trustees in its composition. This new regulation gives a wider interest in the Management by calling upon the interests of persons not members of the Corporation and thereby enlarging public and private care for the Hospital's growing work. More authority has also been given to the Management by a provision that the names of all appointees to the Hospital Staff shall be submitted for approval to the Hospital Board prior to their confirmation by the Trustees of the University. Both of these changes will add advantage through a broader management, and efficiency through increased authority.

The Hospital is not only commending itself, through

the excellence of its administration, to the community in general, but members of the Medical Faculty, who are deeply concerned in the growth and well-ordered condition of the Hospital, have spoken during the past year in very kind terms of its management, and with words of equal praise of the devotion of the Executive Committee.

In the report, a year ago, of the Dean of the Department of Medicine, the fact was stated that, notwithstanding the falling off in registration at most of the Medical Schools of this country—as well as abroad—the num-

The number of students seeking to obtain the Degree
Department of Doctor of Medicine from the University
of Medicine of Pennsylvania had begun to increase. This increase followed immediately upon the completion of the new Medical Laboratories, through which there were offered almost unequaled opportunities for laboratory instruction. There was also assigned a reason to which it is always agreeable to refer, namely, the constant agencies which are used toward making the student's life happier, and in every way possible to consider his personal welfare and advantage.

The growth of the University Hospital and the increase in the clinical facilities there offered must not be overlooked, when contemplating the causes for the now large body of students in the Medical Department.

The percentage of increase in the First Year class now, compared with the size of the First Year class before we possessed the facilities of the new Medical Laboratories, is quite sixty per cent, and this year, as well as last year, the

Pennsylvania Medical School is the largest of any University Medical School in this country.

Of the entire class which was graduated in June, 1906, nearly ninety per cent had secured, and chiefly by competition, Hospital appointments. This is believed to be the best record of competitive attainment in the annals of our Medical School, and merits particular notice.

Notwithstanding the notable change for the better in the opportunities offered to the medical student, both in laboratory subjects and in clinical instruction, and notwithstanding the yearly and growing earnestness of the student to avail himself and profit by them, as evidenced, in one aspect, by the appointments to Hospital positions, and in many other ways which come to us from time to time, the question of advancing the entrance requirements has been now, for eighteen months, receiving the careful study of the Medical Faculty and of the Medical members of our Board. The study of medicine has become a complicated study and is a science depending upon other sciences, so that it grows with the advance in knowledge of many subjects, all of which, taken together, include and comprehend what we know as "medicine." It is believed to be right that preparatory work in a number of subjects—such as physics, chemistry, botany, zoology, together with a reading knowledge of French and German—should not be given after admission to the Medical Department, but should be included in the student's educational equipment before he enters upon his work in the Medical School. The recommendations of the Medical Council and the Medical Faculty in the matter of raising the requirements for admission to this Depart-

ment have met with the official approval and sympathy of your Board, and these requirements for admission will, as soon as they shall have gone into effect, be at least equal to those of the leading Medical Schools of the world. I have no doubt that for a time there will be a decreased attendance; but as the University never does anything for a commercial reason, we shall disregard this now, as we have hitherto disregarded it, for great good will come to the University and the community, and very great benefit to every student who in due time will enter under the new rules of admission.

For the information of your Board, and for general information, I restate the advance in entrance requirements, which is a graded one, covering three years. It is as follows :

I. REQUIREMENTS FOR ADMISSION, SESSION OF 1908-1909.

The requirements for the session 1907-1908 above described will remain in force with the following modifications :

1. Two foreign languages must be offered, one of which must be either French or German.

2. The requirements in Physics, Chemistry and General Biology or General Zoology are described below. These requirements may be satisfied either by *examination*, or by the *submission of a general certificate* satisfactory to the Board of Examiners in the Medical Department. All students, however, whether entering by examination or by certificate, must submit written evidence of their laboratory work in the form of note books, or other record of experiments, accompanied by the usual teachers' certificates as to the trustworthiness of the record.

(a) Physics. The preparation should include :

The study of at least one standard text-book such as Carhart & Chute, *High School Physics*, or Gage, *Elements of Physics*, to the end that a pupil may gain a comprehensive and connected view of the most important facts and laws in Elementary Physics. Individual laboratory work comprising in the various departments

of physics at least 35 exercises such as those printed and published in the list distributed by the College Entrance Examination Board.*

(b) Chemistry.

The required laboratory course shall cover the more important experiments described in such text-books as Richter, *Inorganic Chemistry*, or Remsen, *College Text-Book of Chemistry*, and in addition, work in qualitative analysis as covered by Medicus, *Qualitative Analysis*, or any equivalent book. The laboratory work in qualitative analysis shall include at least two analyses of each group of metals and of acids, and also analyses of at least six mixtures containing metals and acids of the various groups.

(c) General Biology or General Zoology.

Either General Biology or General Zoology may be offered for admission; preparation in either of these subjects pre-supposes a full year's course of five hours per week, or its equivalent, not less than two-thirds of the time being devoted to laboratory work, guided by definite directions; this should be supplemented by a study of some modern elementary text-book, such as the following:

T. Jeffery Parker, *Elements of Biology*.

Sedgwick and Wilson, *General Biology*.

Parker and Parker, *Practical Zoology*.

Linville and Kelly, *General Zoology*.

The scope of the course should be similar to that outlined in the text-books named. Each student should keep a laboratory note book in which to enter from day to day a record of the laboratory work done; this record should consist of carefully labelled outline drawings of the chief structures studied, and accurate notes of all observations, experiments or demonstrations which cannot be recorded by drawings. This note book, properly certified by the teacher, must be submitted by the applicant for admission. The requirements here outlined are essentially similar to those specified by the College Entrance Examination Board for the subject of Zoology.*

3. Candidates for admission who have had insufficient preparation in Physics, Chemistry, General Biology or General Zoology, but who have successfully completed at least three years of an accepted College course, will be admitted with conditions in these subjects.

* For detailed information of the requirements specified by the College Entrance Examination Board, candidates are referred to Thomas S. Fiske, Ph. D., Post Office Substation 84, New York City.

II. REQUIREMENTS FOR ADMISSION, SESSION 1909-1910.

1. Candidates must have successfully completed work equivalent to that prescribed for the Freshman class in colleges recognized by this University, provided that one of the languages offered be either French or German.

(a) Certificates to that effect from such recognized colleges will be accepted in lieu of an examination.

(b) Candidates not presenting such certificates will be required to pass examinations as follows:

Two of the four languages (one of which must be either French or German).	{	English	{	Equivalent to that prescribed for the Freshman class in colleges recognized by this University.
		History		
		Mathematics		
	{	French	{	To an extent sufficient to admit to the Freshman class of colleges recognized by this University.
		German		
		Latin		
		Greek		

(2), (3). The provisions of (1), (2), (3), will remain in force.

III. REQUIREMENTS FOR ADMISSION, SESSION OF 1910-1911.

(1) Candidates must have completed successfully work equivalent to that prescribed for the Freshman and Sophomore classes in colleges recognized by this University, provided that one of the languages offered be either French or German.

(a) Certificates to that effect from such recognized colleges will be accepted in lieu of an examination. *

(b) Candidates not presenting such certificates will be required to pass examinations as follows:

Two of the four languages (one of which must be either French or German).	{	English	{	Equivalent to that prescribed for the Freshman and Sophomore classes in colleges recognized by this University.
		History		
		Mathematics		
	{	French	{	To an extent sufficient to admit to the Freshman class of colleges recognized by this University.
		German		
		Latin		
		Greek		

(2), (3). The provisions of (1), (2), (3), will remain in force.

The history of all such actions is that while there is a temporary decrease, an increase follows as soon as those intending to enter the profession of medicine have had time to adjust themselves to the new conditions. For while it is true that there is in every country a temporary imposition by men who enter the professions through easy ways, they are not very long in the field of action, and the young men of character and ability and of purpose are always seeking for the very best places in which to pursue their chosen studies. We may then, for two or three years, lose in numbers, but in the end we shall have quite as large a body as we shall be able to care for,—for, as the Dean says, every encouragement in the way of material and equipment has been provided by the Trustees for the Department of Medicine.

At last, after years of patient waiting and loyal service on the part of the Faculty of the Department of Veterinary Medicine, we have a word of good cheer and encouragement to record in this report. Mrs. **The** Goodwin's gift of \$100,000, to add to the **Department** endowment of the School, was followed by **of Veterinary** an appropriation by the State of Pennsylv- **Medicine** ania, at the last meeting of the Legislature, of a sum in the same amount toward the erection of the new buildings.

The Dean of the Department, Dr. Pearson, has been to Europe and has studied all of the important Schools of Veterinary Medicine upon the Continent. Upon his return, the architects, Messrs. Cope & Stewardson, translated the

thoughts of Dr. Pearson and his associates into a design for the new Veterinary School and Hospital. We own, through purchase, and without debt, as your Board knows, a very convenient plot of ground for this Department;—a plot covering 55,000 square feet of surface at Thirty-ninth Street and Woodland Avenue. There could probably be no more convenient location than this property. The first buildings are now in course of construction and should be finished by the summer of 1907. The entire design is very comprehensive and will take some years, it may be, to complete,—exactly as is the case with the Dormitories and with the University Museum, but in due time it will be completed; and we can then say of this Department of growing importance, as has been said of the Medical Department, that nothing has been left undone by the Board of Trustees, either in equipment or facility.

In each one of the Reports for the last few years, I have tried to emphasize the national importance of the work of Schools of Veterinary Medicine,—the prevention of disease amongst farm animals, the increase in their productivity, the enormous importance of the subject of animal husbandry. More recognition will yearly be given to the cause of Veterinary Medicine and to those who enter upon this profession as their life profession. The School has a larger registration than ever before, and the need of educated and well-trained scientific veterinarians will continue to increase. One of the causes leading to this increase is to be found, not amongst those to which I have so often referred, and as to which there is really so little general understanding, but it has come about through the action of the United States

Government, whereby an annual appropriation of \$3,000,000 has been made by Congress for the extension of its Federal meat inspection system. As the greatest and by far the most important of the nation's industries is agriculture and as, without domestic animals, agriculture is impossible, we shall now have not only the economic importance of protecting the farm animals and making them more efficient, but we shall have the incentive to safeguard our own lives and good health through the services of the veterinarian. The profession seeks men; it is an unfilled profession; more students will enter it, and more teachers will be required for their training. Europe is far beyond us in the importance which it attaches to the science of Veterinary Medicine. It is only at its beginning in our country, but the beginning has been made, and this subject of human interest and value will have an increasing career and history of usefulness and credit and public estimation.

I have already referred to the death of Mr. Bispham, while still in the service of the University. It is an interesting part of our University history that three of our oldest College alumni, each one of whom chose the law as his calling, should have died at a great age, and within a few months of each other. I refer to Oliver Hopkinson, who was born in 1812 and received his A.B. Degree in 1832; to William Tod Otto, who was born in 1816 and received his Baccalaureate Degree in 1833; and to John I. Clark Hare, who was also born in 1816 and was graduated in 1834, and who died in the 90th year of his

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age upon December 29, 1905. The refinement of Judge Hare's learning is so unusual and is too well known to require any reference to it. Counting the four years of his life at College, more than one-half of his eighty-nine years were associated with the University. For eleven years he was a member of the Board, for twenty years a Professor in the Department of Law in active work, and during the remainder of his life his name appeared in every University Catalogue as Emeritus Professor of Law. There are many of us who will recollect how we consulted Judge Hare as the court of last resort when the question came before us as to the merits of names of deceased members of the Bar, the world over, to be engraved upon the new Law School Building.

The registration in the Department shows a slight increase; but here again comes in the question of the previous preparation of the intending student required by the rules of Court, before a young man can be registered as a student at law. Reference has already been made to the general rule adopted by the Supreme Court of Pennsylvania and operative throughout the State, whereby no applicant can be registered as a student at law until he shall have passed a preliminary examination evidencing his qualification so to register. There is also a body known as the State Board of Law Examiners, before whom a final examination is had after graduation before permission to practice in the Supreme Court of Pennsylvania is given. Since these rules have gone into effect, the number of young men who have succeeded in passing their preliminary examinations is very small annually; at present not many more than one hun-

ed. Until there shall have been an adjustment to these regulations, we cannot look for a Law Department of considerable size. It will be a case of good quality, and of large quantity. The University will continue to carefully work under all regulations which will elevate the profession of law and its practice.

These judicial requirements for admission to enter upon the study of law have been followed by another action, originating in the Faculty of Law and approved by the trustees. Through this recommendation of the Law Faculty and its subsequent approval by your Board, a minimum age limit of twenty is added to our entrance requirements. A student to register in the Department of Law must now be at least twenty years of age. The Dean of the Department states the views of the Faculty for this new rule, which are in effect, that, with rare exceptions, a young man under twenty years of age is not able to do the work required of him, and that it is therefore an injustice to admit him as a student before he has reached the age of twenty. This new rule will tend for the time being to prevent the growth of the School in numbers and probably will even decrease its registration. The Faculty without exception are now earnestly in favor of this age limit, and it appears to meet, more and more, with the approval of members of the profession.

I have already called attention to the increase in the Middle Law Library, largely by the gift by his daughters of the library of Mr. R. C. McMurtrie.

I beg to call attention to the extraordinary use of the Law Library by undergraduates in Sharswood and McKean

Halls, and to the increase in the use of McMurtrie Hall for graduate study and original work. The Dean estimates that, upon an average, nearly one thousand books a day are taken from the shelves. The Library, too, is open throughout the summer, and is in constant use by members of the Bar. There is no one who does not say, as time goes on, that the Department of Law has the best means for the teaching of the law, in building and equipment, anywhere to be found in this country.

It is a pleasure to speak of the work of the Evening School of Accounts and Finance. This is the second year of its institution. One year ago there was an average enrolment of about 140. This average enrolment has increased in the second year to 250. Of this number, 160 young men, of maturity of age and purpose, have been devoting the entire four evenings of every week during the Evening School year to such courses as Real Estate, Banking, Finance, Advanced Accounting and Insurance. Many of them have attended approved High Schools and a goodly number are College men. It would be difficult to find so many young men, actively occupied during the day, willing to devote the majority of their evenings to self-improvement. I have had the pleasure of meeting them. They speak with uniform satisfaction of their interest in what the University is doing for them, and the University may well be gratified at having such a group of young men, who will soon play

important parts in the affairs of the community, students of the University of Pennsylvania.

It has been a pleasure to me to be more than once in attendance at the sessions of the Evening School, and I look forward to another meeting. We have no more earnest, we have no more loyal, a body of University students than those who are members of the Evening School of Accounts and Finance. As the influence of the University is being felt in their lives, so in many directions we hear of their reciprocal attention in promoting the welfare of the University.

I am glad to have the chance of saying these words of congratulation to the Director of the School, to his associate instructors and to the members of the two classes.

The Department of Dentistry maintains its position of supremacy and is everywhere, I believe, held in estimation as being the first in respect of quality, either abroad or at home. The geographical distribution of its student body is widespread. Forty-nine different States and countries contribute to its enrolment. The Dean and the members of the Faculty and the Demonstrators are constantly alert to make the courses of instruction, whether didactic or clinical, more and more helpful to students, and this sustained purpose has met with a remarkable response, not only from the student body, but from the alumni as well. Graduates of our School of Dentistry are active not only for the Dental Department, but for the University of

Pennsylvania in almost every part of the world, and the undergraduate body, cosmopolitan as it is, begins early to take a cordial interest in University affairs. It is sufficient to say that the members of the Faculty are filled with pride in their work, that the alumni of the Department are in unison with the Faculty, and that the student body is composed of hard-working and earnest University men. It is impossible to say anything concerning the work of the Department of Dentistry in any relation except words of commendation.

The regret which the Faculty feel is that it has not yet been sustained in their purpose to make the course in Dentistry a four-years' course. The Association of Dental Faculties are not willing to take this step, and until we have their co-operation, it may be impossible for the University alone to make the course one of four years.

The University Museum—the Museum of Archæology—is one of our interesting Departments. In a recent address before the Superintendents of Schools of Philadelphia and vicinity, and before many teachers of the Schools, the President of the Board of Public Education of the City of Philadelphia, who had paid a critical visit to the Museum upon the morning of that day, said that, with the exception of the Metropolitan Museum in New York City, it was the most interesting place of its kind and scope anywhere, within his knowledge, in this country.

While no field work, this year, has been done, the Curators have been active in publication and in the instal-

lation of many objects already acquired. In the Babylonian Section, Dr. Hilprecht has published his volume—one of the series already announced—entitled: “Mathematical, Metrological and Chronological Texts from the Temple Library at Nippur.” Dr. Clay has published two volumes, entitled: “Documents from the Temple Archives of Nippur in the Reign of the Cassite Rulers.” Dr. Ranke, now no longer with us, a volume upon “Babylonian Legal and Business Documents from the Time of the First Dynasty.” And Dr. Gordon has contributed two papers: (a) “Notes on the Western Eskimo;” (b) “An Engraved Bone from a Prehistoric Tomb in Ohio.”

While, as I have said, no field work has been done this year, arrangements have already been made for extensive work in the field during the coming year. Provision is ready at hand for a prolonged expedition in the spring of 1907, by Dr. Gordon, to Alaska, for purposes of study and the collection of material, which will not be possible to secure a few years hence. Through the munificent liberality of Mr. Eckley B. Coxe, Jr., work in Egypt has been arranged for a period of five years, and Mr. Coxe has also given the University the means to engage a Curator of the Egyptian Section. Upon the recommendation of the Board of Managers of the Department of Archæology, Dr. David Randall McIver has been elected Curator of the Egyptian Section. Dr. McIver will spend the winter of 1906-07 at work in Egypt.

The number of visitors to the Museum continues to increase, and the number of lectures and receptions there given continues also to increase.

Two bequests for this Department have been received during the year, but very much more money is needed. When it is understood that the Museum is kept open daily throughout the academic year without charge; that there is no income from any source except from private gift; that everything connected with its work,—in maintenance, in the salaries of the Curators, in publications, in expeditions,—requires liberal expenditures, your Board, I am sure, will wish to make in this Report a vivid appeal for the necessary means, so that the Department of Archæology may not only carry on the work which it has been doing, but a very enlarged work which is open to it to do, and which it can only do by public and private help.

The report of the President of the Department contains at length the Minute upon the death of Mr. Clarence H. Clark. Mr. Clark was one of the most far-seeing and broad-minded and public-spirited of our citizens. He contributed in many ways to the University,—to its Babylonian Expeditions, to the Building Fund of the University General Library. A friend not only of the University, but a personal friend to all those who have been in administration, he was always ready to help; and, as Mr. Houston says, he completed his many University benefactions by sharing with his brother, Mr. Edward W. Clark—also deceased—in the endowment of the “Clark Research Professorship of Assyriology,” in the sum of \$100,000.

In the previous pages of this Report I referred at length to the death of General Isaac J. Wistar, and I will now say

a few words concerning the work of the Wistar Institute,—which he is no longer with us to direct and observe. During his lifetime it was his great desire that the Wistar Institute of Anatomy might come to be regarded as the national center for new and original work in Anatomy, and for this purpose he called to his help the advice of the leading anatomists in America. They responded to this call with great interest, and General Wistar was present with them during their first sessions in 1905. There was no one present at those sessions—many of whom had never met General Wistar before—who did not feel aroused and desirous to co-operate with him. Every member of this Advisory Board of Anatomists was present at the second annual meeting, which was held in April, 1906. The Director, in his report, gives an outline of the result of this convention, and records the four suggestions made by this Advisory Body by which the work of the Wistar Institute will be most efficiently advanced.

Dr. Donaldson, Professor of Neurology, and the Director, Dr. Greenman, have spent several months during the summer in foreign study. They visited many laboratories and many men of international scientific reputation in the subjects allied to the work of the Institute. They have returned, feeling that they have brought the University and the Wistar Institute into much closer relations with the Anatomical Institutions of Europe, and with such added information as will enable them to bring to a higher state of efficiency the laboratories in the Wistar Institute.

Upon the recommendation of the Advisory Board, Neurology has been selected as the major field of work for

the time being, and collections of human brains are being steadily added to the collections, for the purposes of this study. It is interesting to note that the brains of eight persons (whose identity is always kept unknown) have been received during the year. The desire of the Faculty of the Institute is to accumulate in time, by will or otherwise, a large collection of such brains of high type.

A great deal of work has been done in the equipment of the laboratories, and the library shows some increase. The private library of Dr. Donaldson has been placed on loan, for the use of investigators. For the scientific activity in Neurology, by Dr. Donaldson and his associates, and of those who are doing special work for the Wistar Institute in laboratories elsewhere and under the general direction of the Institute, I ask you to consult the report of the Director.

During the year, the Wistar Institute has received a formal recognition, through the Imperial Academy of Sciences of Vienna, as an international center of brain research in America, and in the words of the Director, "hereafter, in America, all co-operation with the Central Brain Commission will be done through the Wistar Institute."

Through his will, General Wistar left to the Institute his entire general library, consisting of about 4,000 volumes. Many documents of national interest, private letters and correspondence, etc., etc., now belong to us, through this bequest, and have been arranged in a special room chosen for this purpose, in life, by General Wistar himself.

The report of the Director of Physical Education contains one clause which might well be quoted as the evidence

of the great benefit coming to our student body through the Department of Physical Education, which has only now completed the second year of its life. The Director uses these words: "Already it is being frequently remarked that Pennsylvania students are becoming known by their erect and manly bearing." The Director recites the number of students who take prescribed work in the Gymnasium during a part of the twenty-seven hours of each week, in which classes are held—the total number, this year, being over 1,800, an increase of very nearly twenty per cent over last year. Gymnasium exercise, under expert direction, has become popular at Pennsylvania, and while no mention is made of the fact in the report, Dr. McKenzie says elsewhere that there is now no trouble at all in the matter of student attendance upon the many classes. There are even those who volunteer to be class leaders, for the purpose of overseeing the elementary instruction, and not a few students, interested in bettering their physical condition, have formed the habit of calling to see the Director, or his staff, to ask for advice.

In 1905-06 the total number using the Gymnasium and Franklin Field was 1,926, and this year it is 2,319. Not only do these figures show an increase, but they show what is much more than this, that the efforts of the Department to reach the main body of the students, and by exercise and advice to raise them to good physical condition, and to maintain them in this condition, is meeting with success.

Your Board will find the entire report full of interest; interesting in the recital of the detail for the arrangements

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in the athletic activities at the University—of more than ten different sorts; in the increase in the number of those who have been taught to swim; and in the very important matter of the decrease in defective vision, with its attendant bad consequences.

The only difficulty which the Department appears to encounter is the academic roster, which is so full as to make it hard to arrange for Gymnasium work, without some conflict with the class-room.

The work of the Graduate School is always deeply interesting to speak of, for in the Graduate School the scholars of the University are gathered. There has been a steady growth in numbers and the strictest maintenance of the highest standards. The registration now exceeds 300, a number never before reached. The work of the Graduate School is to train teachers and investigators. While almost every registered student finally becomes a teacher, that student, nevertheless, during work in the Graduate School, as the courses are at present arranged, is obliged to specialize highly. This is particularly the case in the requirements for the Doctorate Degree. The Dean asks attention in his report as to whether it would not be wholesome and helpful to arrange courses in the Graduate School intended specifically for those who propose to take up the profession of teaching for their life-work,—courses which will lead to the Degree of Master of Arts,—a Degree which at present has not a recognized professional meaning. Your Board will probably have some specific recommendations

from the Faculty of the Graduate School upon this subject, during the coming academic year. We shall all desire to encourage every suggestion which may lead to the best special education of those who intend to become investigators, and equally, to do everything in our power for the helpful training of all who intend to become teachers.

The number of Degrees of M.A. and Ph.D. conferred at the last Commencement Day, reflects the growth of the School and the excellence of its work.

To add to the library facilities, it was a pleasant power to be enabled to appropriate from the income of the George L. Harrison Foundation the sum of \$5,000 and to place the use of this fund at the disposition of the Dean and Faculty of this Department. It was also an agreeable privilege to give permission to Fellows under the Harrison Foundation to do a limited amount of teaching,—not altogether for the benefit of the Graduate School, and not at all to relieve others from their teaching, but especially for the benefit of the Fellows themselves. The old Latin saying still lives, that one begins to learn in order to teach, and keeps on teaching in order to learn.

The scientific activity of the Faculty and the original work of the Fellows upon the Harrison Foundation, and upon other Foundations, and the work of the six University Research Fellows, make an extraordinary showing. It will be stimulating to all of us to contemplate and understand it. A review of the scholarly activities of the year, written by the Dean of the Department, was read at the opening meeting of the Graduate School, and was subsequently published in the November number of the *Alumni Register*. The

single matter which the Dean forgot was to refer to his own abundant original work. In the report under review, and published in this volume, there is a detailed statement of the research work of the many Fellows, and I beg to ask your earnest consideration of what the Faculty and the Fellows of the University are doing as recited in the address of Dr. Child, and in his report, upon which I am making this brief comment.

I will utter no further word of reference or congratulation upon the work of the Graduate School during the past academic year. The word has been written and it remains, and I respectfully ask that every member of the Board will read the *Alumni Register* for November, 1906, and the report of the Dean of the Department.

In closing this review, there is but one other question to which I am bound to call your notice. During the year past, as the report of the Treasurer will show, the University received, through gifts and from other sources outside of its income from tuition fees, and income from invested funds, the sum of \$544,831.54. But this sum does not nearly meet the immediate needs of the University. We all have, it is true, hearts full of thankfulness for the harmony and kindness and consideration one toward the other, which prevail in our entire University Body. We are very grateful, also, for the gifts which have been made to us. But if I were to refer to the one question of the standard of salaries at the University, I would take up a question which we must justly and generously solve; but to accomplish this we shall require large additions to our income and to our

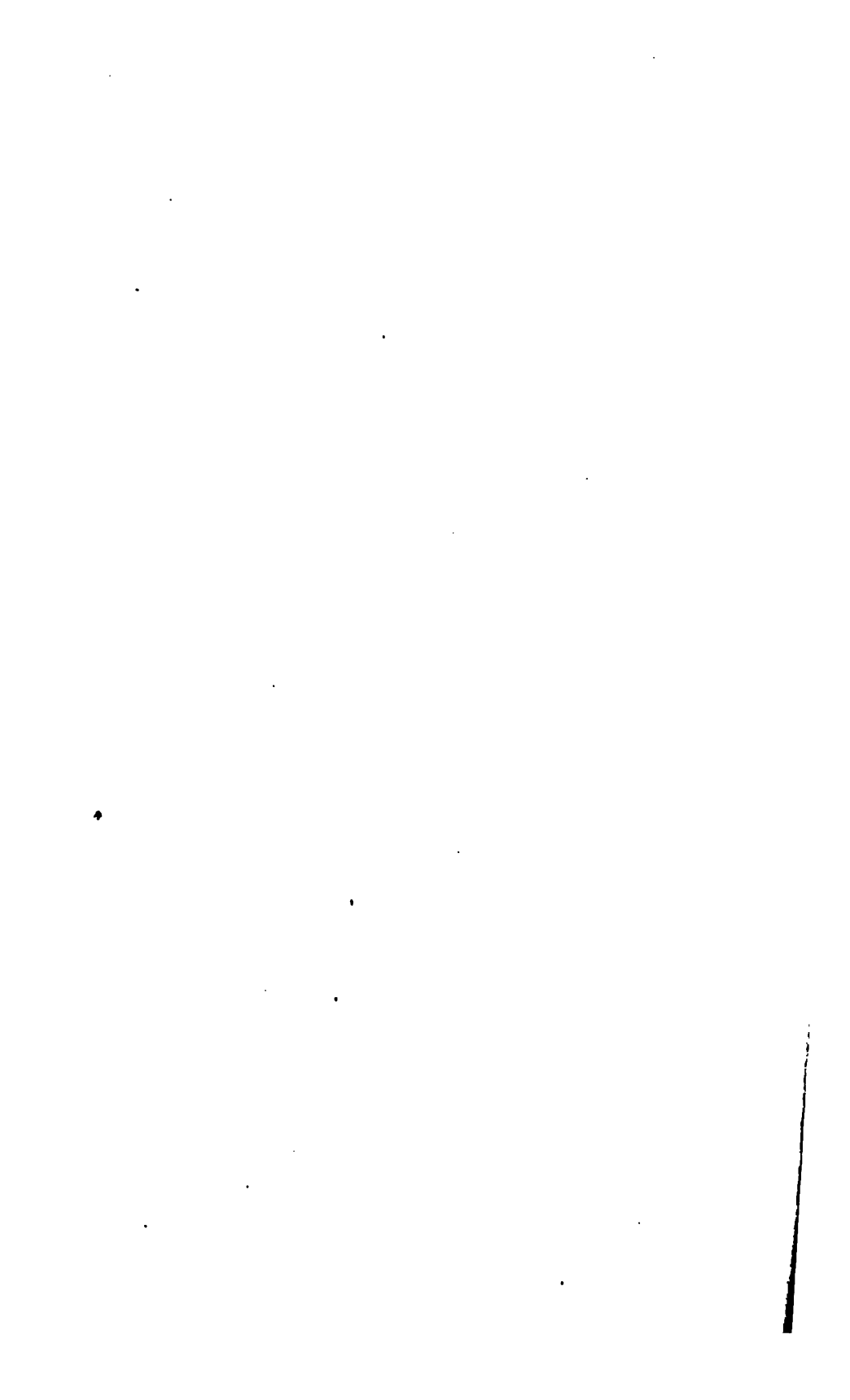
invested funds, received from thoughtful men and women of good will. General Wistar referred to the endowment of Chairs as one way in which we could be helped. The increase of the Dormitory System is another way in which we can be helped. The endowment of Scholarships; the endowment of Hospital Beds; the provision for the many separate requirements for which individual professors and teachers ask, for they need them in their daily work;—are other ways in which the University can be helped. We are not unmindful of all that has been done for us by the City of Philadelphia, by the State of Pennsylvania, and by the men and women of the State. We cannot but be thankful for the great result of their consideration of the University, as evidenced by the student registration and by the work of the several Departments, as set forth in detail by their respective Deans; but with all our feelings and expressions of appreciation we cannot be contented while such standards of salaries continue as those which we maintain, and which we are unable to increase without adequate public help. And for this public help we ask with the most earnest hope of receiving it, and with the pledge that, as in the past, we have tried to use economically and wisely every dollar which has come to us, so, in the future, we will do the best in our power to be faithful trustees of the benefactions, greater and greater, we hope, which the coming year, and those which are to follow, will bring to the University of Pennsylvania.

I am, very respectfully,

Your obedient servant,

CHARLES C. HARRISON,

Provost.



APPENDICES.



APPENDIX I.

PERSONAL CHANGES.

BY DEATH.

JOHN VAUGHAN MERRICK, Trustee.

GENERAL ISAAC J. WISTAR, Secretary Wistar Institute.

GEORGE TUCKER BISPHAM, Professor of Equity Jurisprudence and Professor of Law.

JOHN INNIS CLARK HARE, Emeritus Professor of Law.

GEORGE M. DALLAS, Professor of Law.

JOSEPH E. GILLINGHAM, President Board of Managers Veterinary Hospital.

CLARENCE H. CLARK, Manager Free Museum of Science and Art.

BY RESIGNATION OR EXPIRATION OF TERM.

JOHN H. CONVERSE, Manager Free Museum of Science and Art.

EDWARD B. SMITH, Manager Free Museum of Science and Art.

MARTIN G. BRUMBAUGH, Professor of Pedagogy.

EDWARD W. MUMFORD, Bursar of the University.

MISS SUSAN W. RANDALL, Assistant Librarian.

ROBERT FORMAD, M.D., Demonstrator of Normal Histology.

SAMUEL McCLARY, 3d, M.D., Assistant Demonstrator of Normal Histology.

JOHN M. SWAN, M.D., Demonstrator of Osteology.

GEORGE P. LAROQUE, M.D., Assistant Instructor in Surgery.

WARD F. SPRENKEL, M.D., Assistant Instructor in Obstetrics.

NORTON DOWNS, M.D., Assistant Instructor in Obstetrics.

FRANK A. CRAIG, M.D., Assistant Instructor in Clinical Medicine.

RAE S. DORSETT, M.D., Assistant Demonstrator of Anatomy.

ROBERT N. WILLSON, M.D., Instructor in Medicine.

VERNER NISBET, M.D., Assistant Demonstrator of Pharmacodynamics.

WHARTON HUBER, Technical Assistant.

H. S. JENNINGS, Assistant Professor of Zoology.

H. W. BROWN, Assistant Professor of Electrical Engineering.

H. C. IVES, Assistant Professor of Civil Engineering.

M. J. BABB, Instructor in Mathematics.

E. M. BANKS, Instructor in Economics.

W. M. BARR, Assistant in Chemistry.
W. E. BARROWS, JR., Instructor in Electrical Engineering.
J. A. BECK, Assistant in Political Science.
T. D. O'BOLGER, Instructor in English.
W. N. COLLINS, Assistant in English.
L. CORSON, Assistant in English.
H. L. CROSBY, Instructor in Greek.
C. E. DIMICK, Instructor in Mathematics.
J. C. DUNCAN, Assistant Instructor in American Industries.
J. FRAZER, Instructor in Chemistry.
H. W. GARNER, Assistant in English.
H. GEBHART, Instructor in Mechanical Engineering.
A. H. GILL, Instructor in Mechanical Engineering.
L. B. HESSLER, Assistant in English.
A. J. HOULE, Instructor in Civil Engineering.
T. W. HUFF, Reader in History.
G. W. KELLER, Assistant in Drawing.
L. H. LOSSE, Instructor in Civil Engineering.
H. W. MCCONNELL, Instructor in Mechanical Engineering.
W. I. PAYNE, Instructor in Mechanical Engineering.
F. M. RIVINUS, Assistant in English.
R. C. SEMPLE, Assistant in Civil Engineering.
A. G. TERRY, Assistant in History.

BY PROMOTION.

WILLIAM N. BATES, Professor of Greek.
CLARENCE G. CHILD, Professor of English.
JAMES T. YOUNG, Professor of Administration.
J. RUSSELL SMITH, Assistant Professor of Geography and Industry.
ALOYSIUS O. J. KELLY, M.D., Assistant Professor of Medicine.
F. EHRENFELD, Assistant Professor of Geology and Mineralogy.
J. F. MEYER, Assistant Professor of Physics.
G. W. DAWSON, Assistant Professor of Drawing.
J. W. HARSHBERGER, Assistant Professor of Botany.
H. P. FRY, Assistant Professor of Mechanical Drawing.
H. E. EHLERS, Assistant Professor of Experimental Engineering.
GEORGE FETTEROLF, M.D., Demonstrator of Anatomy.
HENRY R. ALBURGER, M.D., Demonstrator of Pathology.
T. TURNER THOMAS, M.D., Instructor in Surgery.
J. J. MORRIS, Superintendent of Shops.
HENRY S. WIEDER, M.D., Assistant Demonstrator of Surgical Pathology.
EDWARD B. MEIGS, M.D., Assistant Demonstrator of Physiology.

BY ELECTION OR APPOINTMENT.

- JOSEPH BREVITT TOWNSEND, JR., Trustee.
GEORGE HARRISON FRAZIER, Trustee.
HENRY GALBRAITH WARD, Trustee.
MILTON J. GREENMAN, Secretary Wistar Institute.
CHARLTON YARNALL, Manager Free Museum of Science and Art.
JOHN W. CONVERSE, Manager Free Museum of Science and Art.
C. HOWARD CLARK, JR., Manager Free Museum of Science and Art.
MARTIN G. BRUMBAUGH, Manager Free Museum of Science and Art.
A. D. YOCUM, Assistant Professor of Pedagogy.
WILLIAM O. MILLER, Bursar of the University.
DAVID RANDALL-MACIVER, Curator of the Egyptian Section, Department
Archaeology.
MISS KATHARINE S. LEIPER, Assistant Librarian.
GEORGE L. STREETER, M.D., Associate in Neurology.
S. HATAI, PH.D., Associate in Neurology.
ALEXANDER H. UHLE, M.D., Assistant Instructor in Genito-Urinary
Diseases.
ALFRED REGINALD ALLEN, M.D., Director of Photo-Micrographic De-
partment.
RUFUS B. SCARLETT, M.D., Voluntary Assistant Demonstrator of
Pathology.
EWING TAYLOR, M.D., Assistant in Anatomy.
WILLIAM H. F. ADDISON, M.B., Demonstrator of Normal Histology.
WALTER S. CORNELL, M.D., Demonstrator of Osteology.
HAROLD B. WOOD, M.D., Assistant Demonstrator of Normal His-
tology.
DAVID KAPP, Assistant Demonstrator of Pathology.
WILLIAM W. CADBURY, M.D., Assistant Demonstrator of Pathology and
Assistant Demonstrator of Pharmacodynamics.
RALPH S. LAVENSON, M.D., Assistant Demonstrator of Gross Morbid
Anatomy.
JOHN SPEESE, M.D., Voluntary Assistant Demonstrator of Surgical
Pathology.
THOMAS B. HOLLOWAY, M.D., Instructor in Ophthalmology.
CLIFFORD B. FARR, M.D., Instructor in Physical Diagnosis.
CHARLES A. FIFE, M.D., Instructor in Pediatrics.
HOWARD C. CARPENTER, M.D., Instructor in Pediatrics.
JESSE HALL ALLEN, M.D., Assistant Instructor in Obstetrics.
JOSEPH M. SPELLISSY, M.D., Instructor in Orthopedic Surgery.
WALTER G. ELMER, M.D., Instructor in Orthopedic Surgery.
GEORGE W. NORRIS, M.D., Instructor in Medicine.

- E. L. INGRAM, C.E., Assistant Professor of Civil Engineering.
VERNER NISBET, M.D., Assistant Instructor in Medicine.
WALTHER E. RAHTE, M.D., Assistant Instructor in Medicine.
THOMAS A. COPE, M.D., Assistant Instructor in Medicine.
WARREN C. GOODWIN, M.D., Assistant Demonstrator of Anatomy.
R. H. HOUGH, Lecturer in Physics.
R. PEARL, Instructor in Zoology.
R. H. RIETHMULLER, Instructor in German.
GEORGE P. MANGOLD, Lecturer in Statistics.
BURNETT SMITH, Lecturer in Geology.
H. L. CROSBY, Lecturer in Greek.
L. W. FLACCUS, Lecturer in Philosophy and Ethics.
R. C. WELLS, Lecturer in Chemistry.
H. E. BARNES, Instructor in Economics.
R. W. BARRETT, Instructor in Municipal Government.
C. W. BALKE, Instructor in Chemistry.
H. D. BATES, JR., Assistant in Drawing.
B. M. BAXTER, Instructor in Mechanical Engineering.
C. W. BLOEMKER, Instructor in Forging.
W. M. BURKE, Instructor in Industrial Management.
G. G. CHAMBERS, Instructor in Mathematics.
F. A. CHILD, Assistant in English.
T. D. COPE, Instructor in Physics.
J. P. W. CRAWFORD, Instructor in Romanic Languages and Literature.
P. DEETER, Assistant in Political Science.
H. J. FORD, Lecturer in Political Science.
G. C. FOUST, Assistant in English.
O. E. GLENN, Instructor in Mathematics.
A. T. GOLDBECK, Instructor in Civil Engineering.
E. T. GRANDLIENARD, Instructor in Civil Engineering.
O. M. GRAVES, Instructor in Civil Engineering.
A. M. GREGORY, Instructor in Civil Engineering.
C. C. GUMM, Instructor in English.
G. N. HAASZ, Reader in History.
P. R. HALL, Instructor in Mechanical Engineering.
W. P. HARBESON, Assistant in English.
M. R. HARKINS, Instructor in Physics.
M. H. JACOBS, Assistant in Zoology.
F. B. LYSLE, Instructor in Chemistry.
E. S. MCCARTNEY, Assistant in Greek and Latin.
J. MARTIN, Assistant in Physics.
B. A. MILNER, Assistant in Commerce.

- J. F. MURPHY, Instructor in Mechanical Engineering.
- S. NEARING, Assistant Instructor in Economics.
- R. PEARL, Instructor in Zoology.
- C. S. REDDING, Instructor in Mechanical Drawing.
- W. S. RICHHART, Instructor in Electrical Engineering.
- W. T. ROOT, Reader in History.
- J. A. SCHAEFFER, Assistant in Chemistry.
- G. W. SCOTT, Lecturer on International Law.
- I. R. SOLOMON, E.E., Instructor in Electrical Engineering.
- H. B. STILZ, Instructor in Mechanical Engineering.
- C. W. STORK, Instructor in English.
- W. S. Tower, Instructor in Geography.
- C. TRAVIS, Assistant in Geology and Mineralogy.
- S. S. WALKER, Assistant in Civil Engineering.
- F. D. WATSON, Assistant in Economics.
- G. WISE, Instructor in Civil Engineering.
- R. YONKER, Instructor in Mechanical Engineering.

APPENDIX II.

REPORT OF THE DEAN OF THE COLLEGE FACULTY.

To the Provost of the University:

SIR: I have the honor to submit my report upon the work of the College for the year 1905-06.

There were given 442* different courses to 1,804† students by 128 members of the teaching staff. The condition of the various departments of the College as concerns registration of students is indicated in the tables appended to this report. The growth of the College in numbers and influence is most encouraging. The erection of the new building for the Departments of Engineering has made available, by the removal of the Department of Civil Engineering, more rooms for other departments, the quarters of which in College Hall had become far too small. The Department in Mathematics has been assigned the rooms formerly occupied by Civil Engineering, which have been extensively altered. The Department of Latin has been assigned a suite of rooms on the first floor, east end, formerly occupied by Mathematics. The Department of History now occupies rooms on the second floor, west end, vacated by Latin and Mathematics. Room 104, which has, for many years, been used for Mathematics, has been remodeled and set apart as

* Including 33 given in the Teachers' Courses and 16 in the Evening School of Accounts, but not including the Summer School of six weeks.

† Including 256 in the Teachers' Courses and 154 in the Evening School of Accounts, but not including 275 in the Summer School of 1906.

the Faculty Room. The Departments of Architecture, English, French, German and Psychology are in great need of additional rooms, which unfortunately cannot be assigned to them, as there are none available.

CHANGES IN THE FACULTY.

At the close of the year Professor M. G. Brumbaugh, who since 1896 had filled the chair of Pedagogy, resigned to accept the position of Superintendent of Schools of Philadelphia. His selection for this important position of public trust was a deserved tribute to his knowledge and ability, and the city has secured in him a man whose breadth of view and catholicity of spirit in all that concerns public education are marked characteristics. Professor Brumbaugh has exerted for years a powerful influence among the teachers of the community, and by his efforts has done much to encourage the pursuit of higher courses by teachers as a necessary part of their equipment for the duties of their profession. His work as professor consisted not only in creating and building up the Department of Pedagogy, as he was the first incumbent of the chair, but also in entering earnestly into the spirit and life of the University. His administration of the Department of Education in Porto Rico, 1900-1902, for which purpose he was granted leave of absence by the University, was a service of great value which his wide experience fitted him in an exceptional manner to render to a people who had just been brought under the influence of American ideas. It was Dr. Brumbaugh's task to establish and administer a system of public education in Porto Rico. His resignation has been received with regret, and the best wishes of his former colleagues go with him as he enters upon the duties of his new position. Dr. A. D. Yocum, Ph.D., who received his degree from this

University in 1900, and who has since that time been Superintendent of Schools of the City of Chester, has been appointed Assistant Professor of Pedagogy.

The resignation of Mr. E. W. Mumford, '89 C., is a source of regret to all who know how numerous and complicated were the duties of his office as Bursar and how efficiently he performed them. Entering the service of the University in 1892 as Assistant Secretary to the Board of Trustees, he became in 1894 Assistant to the Dean of the College and in 1896 Registrar of the College and Department of Philosophy. When in 1901 it was decided to have the fees of all students collected by a University officer through a central office, instead of by the deans of the several departments, Mr. Mumford was appointed Bursar, a position which he held until the close of the academic year 1905-06, when he resigned his position to enter into business. It is fitting to refer to this resignation here, as Mr. Mumford's duties until he became Bursar were almost wholly in the College. Mr. W. O. Miller, '04 C., has been appointed Bursar to succeed Mr. Mumford.

At the beginning of the second term, Assistant Professor H. B. Evans was made Sub-Dean of the College, and during the absence of the Dean on University business, a large measure of administrative work fell on his shoulders. The efficiency with which Dr. Evans performed his new duties and the satisfaction of all with whom he had to deal caused his resignation as Sub-Dean at the end of the year to be received with regret. Dr. Evans desires to devote himself wholly to his scientific labors and to teaching, and therefore withdrew from administrative work.

Dr. W. N. Bates, who during his leave of absence, 1905-06, was in charge of the American School of Classical Studies at Athens and whose published work in Classical Archæology has been received by scholars as of unusual

merit, was recommended for promotion to the rank of Professor of Greek.

The title of Dr. W. B. McDaniel was changed from Assistant Professor of Latin to Assistant Professor of Classical Philology, inasmuch as his work lies in both Latin and Greek.

Ability in their respective departments and faithful service of the University have been recognized by promotion in the cases of the following valued members of the teaching force, whose new titles are indicated: Dr. J. W. Harshberger, Assistant Professor of Botany; Mr. J. J. Morris, Superintendent of Shops; Mr. G. W. Dawson, Assistant Professor of Drawing; Dr. F. Ehrenfeld, Assistant Professor of Geology and Mineralogy; Mr. H. P. Fry, Assistant Professor of Mechanical Drawing; Dr. J. F. Meyer, Assistant Professor of Physics, and Mr. H. E. Ehlers, Assistant Professor of Experimental Engineering.

The following appointments to fill vacancies in the staff or to provide additional force where needed were recommended for the succeeding year 1906-07: E. L. Ingram, Assistant Professor of Civil Engineering; H. E. Barnes, Instructor in Economics; A. D. Yocum, Assistant Professor of Pedagogy; R. W. Barrett, Instructor in Municipal Government; Dr. C. W. Balke, Instructor in Chemistry; H. D. Bates, Jr., Assistant in Drawing; B. M. Baxter, Instructor in Mechanical Engineering; C. W. Bloemker, Instructor in Forging; Dr. W. M. Burke, Instructor in Industrial Management; G. G. Chambers, Instructor in Mathematics; F. A. Child, Assistant in English; T. D. Cope, Instructor in Physics; Dr. J. P. W. Crawford, Instructor in Romanic Languages and Literature; P. Deeter, Assistant in Political Science; H. J. Ford, Lecturer in Political Science; G. C. Foust, Assistant in English; Dr. O. E. Glenn, Instructor in Mathematics; A. T. Goldbeck, Instructor in Civil Engi-

neering; E. T. Grandlienard, Instructor in Civil Engineering; O. M. Graves, Instructor in Civil Engineering; A. M. Gregory, Instructor in Civil Engineering; C. C. Gumm, Assistant in English; G. N. Haasz, Reader in History; P. R. Hall, Instructor in Mechanical Engineering; W. P. Harbeson, Assistant in English; M. R. Harkins, Instructor in Physics; M. H. Jacobs, Assistant in Zoology; F. B. Lysle, Instructor in Chemistry; E. S. McCartney, Assistant in Greek and Latin; J. Martin, Assistant in Physics; B. A. Milner, Assistant in Commerce; J. F. Murphy, Instructor in Mechanical Engineering; S. Nearing, Assistant Instructor in Economics; Dr. R. Pearl, Instructor in Zoology; C. S. Redding, Instructor in Mechanical Drawing; W. S. Richhart, Instructor in Electrical Engineering; Dr. R. H. Riethmuller, Instructor in German; W. T. Root, Reader in History; J. A. Schaeffer, Assistant in Chemistry; Dr. G. W. Scott, Lecturer on International Law; Dr. B. Smith, Instructor in Geology; I. R. Solomon, Instructor in Electrical Engineering; H. B. Stilz, Instructor in Mechanical Engineering; Dr. C. W. Stork, Instructor in English; Dr. W. S. Tower, Instructor in Geography; Dr. C. Travis, Assistant in Geology and Mineralogy; S. S. Walker, Assistant in Civil Engineering; F. D. Watson, Assistant in Economics; G. Wise, Instructor in Civil Engineering; R. Yonker, Instructor in Mechanical Engineering.

At the close of the year Dr. H. S. Jennings, Assistant Professor of Zoology, resigned his position, as did also H. C. Ives, Assistant Professor of Civil Engineering, and H. W. Brown, Assistant Professor of Electrical Engineering.

The following Instructors and Assistants gave up their teaching positions in the University to accept positions elsewhere in advanced rank, to continue graduate work, or to enter upon the practice of their respective professions: M. J. Babb, Instructor in Mathematics; Dr. E. M. Banks, Instruc-

tor in Economics; W. M. Barr, Assistant in Chemistry; W. E. Barrows, Jr., Instructor in Electrical Engineering; J. A. Beck, Assistant in Political Science; T. D. O'Bolger, Instructor in English; W. N. Collins, Assistant in English; L. Corson, Assistant in English; Dr. H. L. Crosby, Instructor in Greek; C. E. Dimick, Instructor in Mathematics; J. C. Duncan, Assistant Instructor in American Industries; J. Frazer, Instructor in Chemistry; H. A. Garner, Assistant in English; H. Gebhart, Instructor in Mechanical Engineering; A. H. Gill, Instructor in Mechanical Engineering; L. B. Hessler, Assistant in English; A. J. Houle, Instructor in Civil Engineering; J. W. Huff, Reader in History; G. W. Keller, Assistant in Drawing; L. H. Losse, Instructor in Civil Engineering; H. W. McConnell, Instructor in Mechanical Engineering; W. J. Payne, Instructor in Mechanical Engineering; F. M. Rivinus, Assistant in English; R. C. Semple, Assistant in Civil Engineering; Dr. A. G. Terry, Assistant in History.

TEACHERS' COURSES.

The presence of several thousand teachers in the immediate vicinity has an important bearing on the work of the University, and the duty of making courses accessible to this influential body of men and women has been recognized in many ways.

Since 1892 the College has offered courses of instruction in various subjects intended especially to meet the needs of teachers, and therefore given on Saturdays when teachers are usually free to attend. New courses have been added from time to time and the work rearranged so as to make it more valuable for those whom it was intended primarily to aid. How numerous these courses have become is seen in the announcements issued for 1906-07, in which will be

found thirty-eight separate courses in the following list of subjects:

Astronomy	History	Physics
Botany	Latin	Political and Social
Chemistry	Mathematics	Sciences
English	Music	Psychology
French	Pedagogy	Zoology
German	Philosophy	

With the increasing recognition of teaching as a distinct profession for which special training is required have come greater demands on the part of school boards and other governing bodies from those who present themselves as candidates for positions. A college degree has come to have, in addition to its intrinsic value, a certain professional value, and many positions are closed to those who do not possess it.

Many of the problems connected with what has been felt to be the duty of the University to the teachers of Pennsylvania and of neighboring States have been discussed at length by the Academic Council of the College, and successive steps have been taken, each marking an advance, toward the establishment of a full college course leading to a degree and accessible in point of roster hours to men and women actually engaged in teaching. In 1900 the Academic Council authorized the establishment of certain courses constituting what is known technically as a "group" in History, Economics and Pedagogy for teachers. A number of teachers availed themselves of this group and received degrees. In 1903 special legislation was enacted by which it was made possible under somewhat rigid restrictions for a graduate of a State normal school, who had taught for at least five years, of which at least two had been in a public high school, to graduate on the completion of twenty units of college work, provided all preliminary requirements in for-

sign languages and other subjects had been satisfied and the candidate had been approved by at least two departments of instruction as a person qualified to carry on satisfactorily work in such departments for the desired degree. Under these regulations a number of men registered and completed the work for a degree, which was conferred upon them. Owing to the hours at which courses were given it was often difficult for men engaged in teaching to meet the requirements. The question was, therefore, again taken up, and, after much general discussion and inquiry, carried on for several months, it was decided to appoint a committee to report a plan by which it would be possible for teachers and other qualified persons, both men and women, who could not attend classes at the usual college roster hours, because of employment, or for other reasons, to pursue, in college, courses leading to the degrees of Bachelor of Arts and Bachelor of Science. This committee, appointed in April, 1905, presented its report in June, when it was laid over until the following October. The report was based on a study of the whole problem. Involving as it did many important questions of administration and of finance, this report received the most careful consideration. It was adopted in November, 1905, and transmitted to the Board of Trustees, by which it was formally approved and ordered to become operative during the academic year 1906-07. The most important recommendations made by the Academic Council were as follows:

That courses, to be given at suitable hours in the evening and on Saturdays, similar in character and scope to those in the course in Arts, be offered to students of both sexes who may qualify for them.

That these courses be under the supervision and direction of the heads of the corresponding departments of instruction in the College.

That such of the Courses for Teachers as shall, from time to time, be judged by the Academic Council, on recommendation of the department of instruction concerned, to be of adequate scope and standard, be incorporated into this scheme.

That students in these courses be classified as Regular Students and as Partial Students, and that admissions to these courses, in either of their categories, be determined as in corresponding cases in the College. That credits be given in these courses in the same way and to the same effect as in the College courses.

That students entered in the College in any category, as regular, special or partial students, be excluded from these courses, except where it be otherwise permitted in individual cases for special reasons by the Academic Council.

That the tuition fees in these courses be regulated on the same basis as they *now* (May, 1905) are in the College.

In the Fasciculus of the College, issued in February, 1906, was the following announcement:

ADDITIONAL COURSES IN THE COLLEGE.

Beginning with the academic year 1906-07, the College Faculty will offer certain additional courses, to be given chiefly during the evening hours. These courses will be similar in character to the corresponding courses now given regularly in the School of Arts, and will count, under suitable regulations, as credits toward the baccalaureate degree. They will be open to both men and women. For further information address the Dean, College Hall.

This announcement, with all the possibilities suggested by it, is, in its influence on education in city and state, one of the most important ever made by the University.

MIXED COURSES, GRADUATE AND UNDERGRADUATE.

In the report for last year attention was called to the legislation enacted jointly by the Executive Committee of the Graduate School and the Academic Council of the College, by which a number of advanced courses in the College are now open to graduate students and a number of graduate courses open to qualified undergraduates. This arrangement is of the utmost value to students in both departments, many of whom are taking courses thus rendered accessible to them. An additional and important advantage of these mixed courses is that they are open to the new class of candidates for degrees in the College Courses for Teachers.

NEW GROUPS IN SOCIOLOGY AND FINE ARTS.

The growing interest and importance of studies in Sociology and the multiplication of courses in that subject have caused it to be given a separate title as a group subject in the Arts and Science course, where it was formerly open as free elective only, being included under the general title of Economics. Five courses in Sociology, of two hours a week each, are now open to Arts and Science students.

The number of electives open to students in the course in Arts and Science was further increased by the important addition of a new "group" in Fine Arts, consisting of courses in the History of Painting, Principles of Delineation, History of Sculpture, Advanced Course in Art, History of Architecture, Philosophy of Architecture.

DEPARTMENT OF MUSIC.

Through Professor Clarke an arrangement, ratified by the Board of Trustees, was made with the Broad Street Conservatory of Music by which students in the course in Music at the University have the privilege of becoming members of the Conservatory Symphony Orchestra and Choruses, with admission to all recitals and lectures, and the opportunity for public performance of their compositions by the Conservatory orchestra. In consideration of these privileges, the University admits pupils of the Conservatory without charge to the Saturday Teachers' Courses in English, French, Italian, German and Psychology.

RULE GOVERNING ABSENCES AND RE-EXAMINATIONS.

Since 1896 the College regulations have permitted a student to be absent from each course during twenty per cent of the total number of hours in the term. While this allowance seemed at first rather large, it was found that the great majority of students did not have so many absences as were allowed, while the small minority, composed chiefly of those whose standing was such as to make their attendance at every lecture necessary, were the ones who abused the privilege of absence. It was seen that a reduction in the number of absences allowed during the term would not affect the more regular and conscientious students and would affect in the desired way those who were negligent. The Academic Council, in January, 1906, amended the rule to read as follows:

A student who is absent, in any course and for any cause, from a number of hours in a given term that exceeds twice the number of hours per week in which that course is given, shall be marked "N" in

that course, and immediately reported to the Dean's office. He may be allowed, however, to continue in class, and to have a re-examination in the subject at the appointed time for re-examinations, except as provided for in section 30.

Students are especially advised that this rule is designed to cover necessary and unavoidable absences from class, and is in no wise to be construed into a privilege.

In the last report mention was made of the shortening of the midyear examination period to one week and the lengthening of the Easter recess to ten days. This change has been most beneficial in its effects on the work of the year. Further legislation affecting examinations was enacted for the purpose of putting together at fixed periods all re-examinations of conditioned students and for emphasizing the fact that a re-examination is a privilege and not a right of a student, and may be refused by any department of instruction. The following are the additional rules:

Any department may refuse to re-examine any student who has failed in a subject. A re-examination is to be regarded as a privilege, not a right.

All re-examinations, except those noted below, are to be held during the periods of entrance examinations in June and September.

Students in the Senior Class about to graduate may be re-examined before Commencement.

Students having conditions in subjects beginning in the second term may be re-examined at the discretion of the department concerned (under the general regulations relating to the times of re-exami-

nations) within the four weeks prior to the beginning of the second term.

BURNING OF OLD ENGINEERING LABORATORY.

The destruction of the old Laboratory of Mechanical and Electrical Engineering, on the night of February 6, 1906, was an event of great seriousness, as the contents of the building were nearly all either burned or damaged by water. Fortunately, the new Engineering Laboratory was near enough to completion to be occupied, though with much inconvenience, and with the energy and efficiency which have always characterized Professor Spangler and those associated with him as Instructors and students, such property as could be used after the fire was transferred to the new building and regular work as far as was possible continued, with the loss of only one day's recitations.

THE NEW ENGINEERING LABORATORY.

The new building for the Departments of Civil, Electrical and Mechanical Engineering, which was occupied of necessity before completion, as stated above, by the Departments of Mechanical and Electrical Engineering, will be formally dedicated and occupied by all the Engineering courses in the fall of 1906. It will be the handsomest and most magnificently equipped Engineering Laboratory that the wise expenditure of thought and money can provide, and constitutes a noble addition to the already great contributions made, and continually being made, by the University of Pennsylvania to education.

CONSTITUTION OF THE TECHNICAL COURSES.

There is an impression on the part of many persons that technical courses and technical degrees represent a

training highly specialized at the expense of those subjects which are commonly regarded as essential to a liberal education, as represented by the courses which lead to the degrees of Bachelor of Arts and Bachelor of Science. While there may be reason for this impression in regard to the courses at some institutions, it is a matter of interest to know that at the University of Pennsylvania a large amount of non-technical work is required of students in the technical courses. We require for the B.S. degree in the course in Arts and Science the completion of sixty units of College work, included in three categories: (1) Required subjects, 12 units; (2) group subjects (two or three), 18 units; (3) free electives, 20 units. A unit is defined as one hour of lecture or recitation, or two hours of laboratory work each week for one year. Calculated on this basis, the following table shows the total amount of work required for the technical bachelor's degree in the courses indicated, and the number of units included in each course that would be accepted as counting toward a degree in Arts and Science:

Course.	Total units in course.	Arts and Science units in course.
Architecture	91	23
Mechanical Engineering	84½	36½
Electrical Engineering	84	35½
Civil Engineering	89	43
Chemistry	77	57
Chemical Engineering	84¾	49½

In every case the number of Arts and Science units is offset by the fact that students in these technical courses offer only *one* foreign language for admission instead of *two*, as required of students in the Arts and Science courses.

The figures given in the table require explanation, which is given below in detail for each of the six courses :

COURSE IN ARCHITECTURE.

	Fresh.	Soph.	Total.
English	3	3	6
One foreign language	3	3	6 (see below)
Mathematics	3	2	5
Chemistry	2	..	2
Physics .....	..	2	2
	—	—	—
	11	10	21
Credit for Solid Geometry (Mathematics D).....			1
			—
Total Credits towards B.S. degree			22

In reference to the credit for one foreign language of 6 units, it should be noted that a part of this is scientific reading, which perhaps should not be counted.

The work of the course in Architecture includes all of the "required" studies of the course in Arts and Science except :

One foreign language	3 units
Logic and Ethics	2 "
History	2 "
	—
Total	7 units

together with the entrance requirement in one language.

COURSE IN MECHANICAL ENGINEERING.

	Fresh.	Soph.	Junior.	Total.
English	3	1½	..	4½
One foreign language	3	3	..	6
Mathematics	4	5	..	9
Physics	2	3	2½	7½
Chemistry	2	2½	..	4½
Analytic Mechanics .....	..	1	1	2
Metallurgy .....	..	..	1	1
	<hr/>	<hr/>	<hr/>	<hr/>
	14	16	4½	34½
Credit for Solid Geometry (Mathematics D).....				1
Credit for Mathematics E and Entrance Physics				1
				<hr/>
				36½

Mathematics E and Entrance Physics do not correspond precisely to any work in College, but it is of the same nature as a part of the required work in Arts and Science, and it seems proper that credit for at least one unit should be allowed for it.

The work of the course in Mechanical Engineering covers all of the "required" studies of the course in Arts and Science except:

English	1½ units
One foreign language	3 "
History	2 "
Logic and Ethics	2 "
	<hr/>
	8½ units

together with the entrance requirement in one language.

The remark made above under Architecture with regard to a part of the work in foreign language (*i. e.*, that a part of it is scientific reading) applies here also.

COURSE IN ELECTRICAL ENGINEERING.

The facts for this course are in all respects like those for the course in Mechanical Engineering, except that the work in Metallurgy is omitted, thus reducing the total to 35½ units.

COURSE IN CIVIL ENGINEERING.

	Fresh.	Soph.	Junior.	Senior.	Total
English	3	1½	..	..	4½
One foreign language	3	3	..	..	6
Mathematics	4	5	..	..	9
Physics	2	3	2½	..	7½
Chemistry	2	2½	..	..	4½
Analytic Mechanics. ..	..	1	1	..	2
Mineralogy .....	..	..	2	..	2
Astronomy .....	..	..	..	3½	3½
Metallurgy .....	..	..	..	1	1
Geology .....	..	..	..	1	1
	<hr/> 14	<hr/> 16	<hr/> 5½	<hr/> 5½	<hr/> 41
Credit for Solid Geometry (Mathematics D)					1
Credit for Mathematics E and Entrance Physics					1
					<hr/> 43

A part of the work in foreign language is scientific reading, as in the other technical courses.

The work of the course in Civil Engineering covers all of the "required" studies of the course in Arts and Science, except as noted for the course in Mechanical Engineering.

COURSE IN CHEMISTRY.

	Fresh.	Soph.	Junior.	Senior.	Total.
English	3	3	2	..	8
One foreign language	3	5	2	..	10
Mathematics	2	..	..	..	2
Physics	1½	1½	..	..	3
Chemistry (in part)	2	3	5	12	22
Assaying .....	..	..	2	..	2
Mineralogy .....	..	2	2	..	4
Ethics .....	..	..	1	..	1
Metallurgy .....	..	..	1	..	1
Geology .....	..	..	..	2	2
	<hr/> 11½	<hr/> 14½	<hr/> 15	<hr/> 14	<hr/> 55
Credit for Mathematics D, E and Entrance Physics					2
					<hr/> 57

A part of the work in foreign languages is scientific reading, as in the other technical courses.

The number of units noted above for Chemistry, that is, for General Chemistry, Qualitative and Quantitative Analysis, does not represent the whole amount of work in these branches taken by students in the course in Chemistry, but only the portion which students in Arts and Science are supposed to take. It might be proper to allow additional credit here.

The work of the course in Chemistry covers all of the "required" studies of the course in Arts and Science except:

History	2 units
Logic	1 unit
One foreign language	3 units
<hr/>	
Total	6 units

together with the entrance requirement in one language.

COURSE IN CHEMICAL ENGINEERING.

The statement for this course is the same as for the course in Mechanical Engineering, except so far as concerns Chemistry, the credit for which, counting in the same way as in the course in Chemistry, is $15\frac{1}{2}$ units. This, together with 2 units for Assaying, makes the total $49\frac{1}{2}$ units. Here also it might be proper to allow additional credit for Chemistry. These tables were prepared by Professor Crawley in connection with an investigation made for the purpose of ascertaining whether it would be possible to combine the course in Arts and Science with the various technical courses so as to make a six years' course, entitling the student, on the completion of it, to two degrees. The combination has been made in some of the courses by a number of students.

DECEASED STUDENTS RECOMMENDED FOR DEGREES.

By unanimous action of the Academic Council, it was decided to recommend to the Board of Trustees that the degrees for which they were candidates be conferred at Commencement on Samuel Heebner Terry, of the course in Chemical Engineering, and Alexander Singer Kemp, of the course in Chemistry. These students, members of the Senior Class, died shortly before the close of the year, to the great sorrow of their teachers and fellow-students.

The appended reports of the respective Directors of the Wharton School of Finance and Commerce, the Summer School and the Evening School of Accounts indicate a most gratifying condition in those departments of the College.

Appended also are statistical tables giving information of interest and importance concerning the registration, the admission of students, the election of Seniors in the Arts and Science course, the geographical distribution of students in the College, the relative standing of students admitted wholly or in part on certificates and by examination, withdrawals, schools from which students in the College came, and scholarships awarded.

Respectfully submitted,

JOSIAH H. PENNIMAN,
Dean of the College.

**REPORT OF THE DIRECTOR OF THE WHARTON SCHOOL OF
FINANCE AND COMMERCE.**

To the Dean of the College:

SIR: During the year 1905-06 the most important aspect of the development of the Wharton School was the enlargement of the enrolment and the extension of the terri-

tory represented by its students. The highest enrolment of students at any time was 276, although the official number entered on the roll fell to 270. This latter was an increase of 44 over the preceding year. The geographical distribution of students during 1905-06 was as follows:

Arkansas	1
Connecticut	1
China	1
Delaware	1
Illinois	4
Iowa	1
Japan	6
Kansas	1
Kentucky	3
Massachusetts	4
Maine	1
Michigan	2
Minnesota	1
New Hampshire	1
New Jersey	10
New Mexico	1
New York	14
Ohio	4
Pennsylvania—	
Philadelphia	163
Outside of Philadelphia	48
Panama	2
Russia	1
West Virginia	1
Washington, D. C.	3
Washington	1
Total	276

Respectfully submitted,

JAMES T. YOUNG,
Director.

REPORT OF THE DIRECTOR OF THE SUMMER SCHOOL.

To the Dean of the College:

SIR: I am sending to you a report of the Summer School for the session of 1906.

It gives me great pleasure to record an increase in the number of students over the total for the year 1905 of 63. The total for 1906 was 275, almost exactly double the number registered for the first session, 1904, when the registration was 137. Of this year's students 169 were men and 106 were women.

The geographical distribution of this year's students compared with the students of the two previous years is as follows:

	1906.	1905.	1904.
Argentine Republic	2	0	0
Austria-Hungary	1	0	0
Canada	0	1	0
Connecticut	2	0	0
Delaware	5	5	1
Florida	0	0	1
France	0	0	1
Germany	0	0	2
Illinois	2	0	1
Kentucky	0	1	0
Maryland	14	3	0
Massachusetts	0	1	0
Mexico	1	0	0
Minnesota	0	1	0
Missouri	1	1	0
Nebraska	0	1	0
New Jersey	20	13	7
New Mexico	1	0	0
New York	9	4	2
North Carolina	0	0	1
North Dakota	1	0	0
Ohio	0	3	2
Pennsylvania	75	72	35
Philadelphia	132	98	80
Poland	1	0	0

	1906.	1905.	1904.
South Carolina	0	1	0
South Dakota	0	1	0
Texas	1	1	1
Utah	0	0	1
Virginia	1	1	0
Washington, D. C.	6	3	2
Wisconsin	0	1	0
	<hr/> 275	<hr/> 212	<hr/> 137

Seventy-five of the students were College students who were either making up conditions or obtaining advance credits. Of the remaining 200, 14 had previously registered in the Summer School, 29 had taken Teachers' Courses, 1 had registered in the Law Department, 2 in the Department of Medicine, 6 in the Graduate School, 1 in Dentistry, and 1 in Veterinary Medicine. Thus there were 146 students who were enrolled in the University for the first time.

I append a comparative statement of the courses subscribed for since the foundation of the school:

	Number of Instructors.			Courses Taken.		
	1906.	1905.	1904.	1906.	1905.	1904.
Architecture	1	1	2	5	14	20
Botany	1	1	2	4	6	6
Chemistry	4	4	4	35	41	16
English	3	2	3	91	63	48
French	1	1	1	32	29	7
German	2	1	1	74	55	24
Greek	1	1	1	7	5	10
History	2	2	1	31	21	4
Latin	1	1	1	24	29	29
Mathematics	4	4	4	88	85	49
Music	1	1	0	18	5	0
Pedagogy	1	0	0	29	0	0
Physics	3	1	1	38	19	10
Psychology	1	1	1	29	10	4

As has been the custom since 1904, an elaborate program of entertainments and excursions was prepared, and proved a very attractive feature of the summer's work. I

wish to emphasize in this connection the services of Dr. James F. Willard, who conducted the excursions to Valley Forge, to Germantown and to Cramps' Shipyard. It was the general consensus of opinion that his conduct of the excursions has contributed greatly to their success.

The most gratifying result of the work this last summer consisted in the marked improvement in the character of the students attending the courses. Quite a fair proportion of College graduates were in attendance, and also there was a considerable increase in the number of school superintendents and of school teachers throughout Pennsylvania and the neighboring States.

There will be in consequence of the Summer School's work several new students in the Graduate School this year who, I feel sure, would not have entered except for the encouragement they received by the members of the teaching force during the summer.

The continued growth of the Summer School for three years proves conclusively that it is now regarded as a permanent part of the University's work. The gratifying increase in some of the departments is due largely to the character of the work offered by those departments.

I would urge again the desirability of offering courses in Physical Education. With the equipment that the University possesses there can be no question of a large enrolment, if such courses were offered.

Respectfully submitted,

ARTHUR H. QUINN,
Director.

REPORT OF THE DIRECTOR OF THE EVENING SCHOOL.

To the Dean of the College:

SIR: I submit the following report of the Evening School of Accounts and Finance for the year 1905-06.

The total enrolment in the Evening School of Accounts and Finance was:

For the first term	275
For the second term	227

Of the students registered the first term 98 men in the first-year class pursued the regular course of four evenings a week, while 62 men took the regular course prescribed for the second year. The remainder pursued special courses of study, taking from one to three courses per week.

The same satisfactory results which I was able to report last November are still obtained. While the average age has slightly decreased, dropping from twenty-eight to twenty-seven and a half years, yet the type of men coming to the Evening School has constantly improved. This advantage is largely due to the fact that the men are much more nearly the same age and become absorbed into college life much more readily.

The most encouraging feature has been the increase in the number of men who have had high school training. Out of the total registration last year 70 men were high school graduates; 80 had taken two or more years' work in recognized high schools, while 33 men were either graduates of or had taken work in recognized colleges.

A notable feature of the year was the enrolment as students in regular attendance of a number of men who had been graduated from the Departments of Arts and Science and the Wharton School, who were attracted to the Evening

School by the special courses which had been inaugurated since their graduation.

During the year a number of new courses comprising the second year's work were successfully given. The most largely attended classes were those in Real Estate, Banking, Corporation Finance, Advanced Accounting and Life and Fire Insurance. All of these courses were given in the Wharton School for the first time during the year under review. The stimulus and criticism of the men engaged in each of these lines of activity were of great assistance to the instructors in strengthening their courses, thereby being directly profitable to the University.

Respectfully submitted,

E. S. MEADE,
Director.

COLLEGE STATISTICS, 1905-1906.

TABLE I.
STUDENTS IN COLLEGE, 1905-1906.

Students in Special Courses.	Fourth Year. Third Year. Second Year. First Year.	Partial Students.	Totals.	Science and Technology.						Totals.	Post-Seniors. Seniors. Juniors. Sophomores. Freshmen.		
				Sec. 1. Chemistry.	Sec. 2. Civil Engineering.	Sec. 3. Mech. and Elec. Eng.	Chemistry.	Ch. E. Chemical Engineering.	C. E. Civil Engineering.			M. E. and E. E. Mechanical and Electrical Engineering.	Arch. Architecture.
57	27	27	46	2	3	2	15	5	27	19	32	1	4
49	27	7	83	4	4	2	17	4	43	61	14	14	197
71	38	7	116	11	11	11	17	8	46	61	24	24	221
99	60	3	162	11	11	11	23	13	54	93	27	27	266
11	11	11	33	11	11	11	11	11	11	11	11	11	381
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	11	11	11	11	11	11	11	11	11
11	11	11	33	11	1								

Students taking Courses for Teachers..... 256
 Students in Summer School—1905..... 216
 Students in Summer School—1906..... 55
 Evening School..... 154
 Total..... 2024

TABLE II.

SHOWING ADMISSIONS TO COLLEGE, 1905.

Average age of students entering Freshman Class in 1903, 19 years, 4 months, 7 days.		
Average age of students entering Freshman Class in 1904, 18 years, 11 months, 8 days.		
Average age of students entering Freshman Class in 1905, 18 years, 3 months, 17 days.		
Total number of applicants		813
Applicants admitted by examination	125	
Applicants admitted on public high school diploma	146	
Applicants admitted by examination and diploma	102	
Applicants admitted to advanced standing	56	
Applicants admitted to special and partial courses by Committee action alone	176	
Applicants admitted to special and partial courses with examinations prescribed	18	
Applicants rejected on examination and admitted as special and partial students	20	
	214	
Total number of applicants admitted		643
Applicants rejected on examination	29	
Applications postponed and withdrawn	18	
Applications rejected and incomplete	47	
	94	
Applicants taking preliminaries and receiving credits...	68	
Applicants taking preliminaries and receiving no credits.	28	
	96	
Total		833
Duplications		20
Grand total		813

APPLICATIONS CONSIDERED BY COMMITTEE ON ADMISSION TO SPECIAL AND
PARTIAL COURSES.

Applications on which the Committee took action		243
Total applications approved	214	
Total applications rejected	18	
Total applications withdrawn	8	
Applications postponed	3	
	29	
		243

Report of the Dean of the College Faculty. 85

**APPLICATIONS CONSIDERED BY COMMITTEE ON ADMISSION TO ADVANCED
STANDING.**

Applicants who entered College	56
Applicants who did not enter College	0
	— 56

**APPLICATIONS CONSIDERED BY COMMITTEE ON SCHOOLS AND ENTRANCE
REQUIREMENTS.**

Total number of cases acted upon	248
Applicants admitted on diploma without examination	146
Applicants admitted on diploma with examination	102
	— 248
Admitted from Philadelphia schools	97
Admitted from Pennsylvania schools	60
Admitted from schools in other States	63
Admitted on certificates from other colleges and from College Entrance Examination Board	28
	— 248

ADMITTED WITH CONDITIONS IN

English A	4	Mathematics E	29
English B	16	History A	5
Latin B	1	History B	4
Latin C	13	History C	6
Latin D	16	History D	5
Latin E	16	Greek A	1
Latin F	15	Greek C	1
Latin G	18	Greek D	2
Physics	15	French A	20
Mathematics A	6	French B	26
Mathematics B	18	German A	13
Mathematics C	18	German B	33
Mathematics D	20		

TABLE III.

SHOWING ELECTIONS OF GROUPS MADE BY JUNIORS AND SENIORS IN ARTS AND SCIENCE.

	1905-1906.	
	Juniors.	Seniors.
Botany-Chemistry-Zoölogy	1	...
Botany-French-German	1	...
Botany-History-Zoölogy .....	..	1
Botany-Zoölogy	1	2
Chemistry-English-Physics .....	...	1
Chemistry-French-German .....	...	1
Chemistry-French-Zoölogy .....	...	1
Chemistry-German-Latin	1	...
Chemistry-Zoölogy	3	6
Economics-English-History	1	2
Economics-English-Political Science .....	...	1
Economics-English-Philosophy .....	...	1
Economics-Geology-German .....	...	1
Economics-German-History .....	...	1
Economics-German-Political Science	1	...
Economics-History	2	...
Economics-History-Latin .....	...	1
English-French-History	4	2
English-French-Latin .....	...	1
English-Geology	1	...
English-German .....	...	1
English-German-History	1	2
English-German-Latin	1	3
English-German-Philosophy	3	1
English-Greek-Latin .....	...	3
English-History	5	6
English-History-Latin .....	...	6
English-History-Philosophy .....	...	1
English-History-Zoölogy .....	...	1
English-Latin .....	...	1
English-Latin-Philosophy .....	...	1
English-Mathematics-Philosophy	1	...
English-Philosophy	3	...
English-Zoölogy	1	...
French-Geology	1	...
French-German	1	...
French-German-History	2	...

	1905-1906.	
	Juniors.	Seniors.
b-German-Mathematics	1	...
b-Mathematics	1	...
un-History	1	1
un-History-Latin	2	1
un-History-Zoölogy	1	1
un-Latin	1	...
un-Philosophy	1	1
un-Zoölogy	2	...
-History	1	...
-Latin .....	...	1
y-Philosophy	2	1
y-Philosophy-Zoölogy .....	...	1
German-Greek .....	...	1
ophy-Zoölogy	1	1
Total	49	57

TABLE IV.
GEOGRAPHICAL DISTRIBUTION OF STUDENTS IN THE COLLEGE, SESSION 1905-1906,
EXCLUDING STUDENTS IN COURSES FOR TEACHERS AND EVENING SCHOOL.

Middle.	South.	West.	New England.	Foreign.
Philadelphia 705	Alabama 7	Arkansas 1	Connecticut 16	British West Indies 2
Pennsylvania 352	Florida 4	California 6	Maine 2	China 1
Delaware 13	Georgia 4	Colorado 4	Massachusetts . . . 10	Cuba 1
Dist. of Columbia . 17	North Carolina . 2	Idaho 2	New Hampshire.. 1	England 1
Maryland 18	Tennessee 1	Illinois 7		Japan 9
New Jersey 70	Texas 3	Indiana 4		Mexico 3
New York 44	Virginia 7	Iowa 3		Panama 3
	West Virginia . . 2	Kansas 1		Russia 3
		Kentucky 18		
		Michigan 6		
		Minnesota 3		
		Missouri 5		
		Montana 1		
		Nebraska 1		
		New Mexico 1		
		Ohio 25		
		Oregon 1		
		North Dakota . . . 1		
		South Dakota . . . 1		
		Washington 4		
		Wisconsin 2		
1219	30	97	29	23
	Middle States 1219			
	Southern States 30			
	Western States 97			
	New England States 29			
	Foreign 23			

TABLE V.
SHOWING RELATIVE COLLEGE STANDING OF STUDENTS
IN THE COLLEGE YEAR 1905-06, WHO WERE ADMITTED
UPON EXAMINATION ALONE, AND STUDENTS AD-
MITTED WHOLLY OR PARTLY UPON CERTIFICATES
FROM PUBLIC HIGH SCHOOLS.

Students Conditioned.

	Total of such Stu- dents in College.	Total who were Con- ditioned.	Number of Conditions.	Conditions per Student Con- ditioned.
Session 1905-1906.				
Regular Students by Certifi- cates (wholly or in part)....	634	425	1754	4.12
Regular Students by Examina- tion.....	372	242	1079	4.46
Regular Students on Advanced Standing	63	41	191	4.68
Specials and Partials	288	241	1224	5.07
Total of College	1357	....	....	....
Music Students	41	....	....	....
Grand Total.....	1398	949	4248	4.47

TABLE VI
STUDENTS WITHDRAWN AND DECEASED.

	Session 1905-1906.		
	Withdrawn.		Deceased.
	1st Term.	2d Ter m.	
Seniors	3	4	2
Juniors	3	9	1
Sophomores	11	10	...
Freshmen	28	32	1
Total Regulars.....	45	55	...
Special, fourth year .....	...	1	...
Specials, second year	2	3	...
Specials, first year.....	31	3	...
Total Specials.....	33	7	...
Partials	32	45	...
Grand Total.....	110	107	4

TABLE VII.

SHOWING THE SOURCES FROM WHICH CAME THE STUDENTS REGISTERED IN THE COLLEGE IN 1905-1906.

Prepared by	Located at	No.
Abilene High School	Abilene, Texas	1
Abington High School	Abington, Pa.	1
Academic School	San Juan, P. R.	2
Alabama Polytechnic Institute	Auburn, Ala.	1
Allegheny High School	Allegheny, Pa.	1
Altoona High School	Altoona, Pa.	2
Armour Institute of Technology	Chicago, Ill.	1
Atlanta Boys' High School	Atlanta, Ga.	2
Atlantic City High School	Atlantic City, N. J. ..	1
Atlantic Highlands High School ...	Atlantic Highlands, N. J.	1
Auburn Academic High School	Auburn, N. Y.	2
		— 15
Baltimore City College	Baltimore, Md.	3
Battin High School	Elizabeth, N. J.	1
Bayonne High School	Bayonne, N. J.	1
Beaver College	Beaver, Pa.	1
Belair Academy	Belair, Md.	1
Berlin High School	Berlin, Md.	1
Bethlehem Preparatory School	Bethlehem, Pa.	2
Big Run High School	Big Run, Pa.	1
Birmingham High School	Birmingham, Ala.	2
Blair Presbyterian Academy	Blairstown, N. J.	3
Blight School	Philadelphia, Pa.	9
Bliss Electrical School	Washington, D. C. ...	1
Bloomsburg State Normal School	Bloomsburg, Pa.	1
Bloomfield High School	Bloomfield, N. J.	2
Boise High School	Boise, Idaho	1
Bordentown Military Institute	Bordentown, N. J. ...	5
Boston Latin High School	Boston, Mass.	1
Bradford High School	Bradford, Pa.	1
Bridgeport High School	Bridgeport, Conn.	2
Bridgeton High School	Bridgeton, N. J.	1
Brooklyn Boys' High School	Brooklyn, N. Y.	3
Brown Preparatory School	Philadelphia, Pa.	31
Bucknell Academy	Lewisburg, Pa.	1
Bucknell University	Lewisburg, Pa.	2
Buffalo University	Buffalo, N. Y.	1
Burlington High School	Burlington, N. J.	1

Prepared by	Located at	No.
Camden High School	Camden, N. J.	2
Cascadilla School	Ithaca, N. Y.	2
Case and Child School	Philadelphia, Pa.	2
Cecil County High School	Elkton, Md.	1
Central High School	Buffalo, N. Y.	1
Central High School	Philadelphia, Pa.	153
Central High School	Washington, D. C.	5
Central Manual Training School	Philadelphia, Pa.	102
Cheltenham Hills School	Wyncote, Pa.	3
Cheltenham High School	Cheltenham, Pa.	4
Cheltenham Military Academy	Ogontz, Pa.	2
Chesapeake High School	Chesapeake City, Md.	1
Chester Academy	Chester, Pa.	1
Chester High School	Chester, Pa.	13
Chestnut Hill Academy	Chestnut Hill, Pa.	11
Cheyenne High School	Cheyenne, Wyoming..	1
Classical High School	Worcester, Mass.	1
Clearfield High School	Clearfield, Pa.	1
Cleveland High School	St. Paul, Minn.	1
Coatesville High School	Coatesville, Pa.	2
Cobleskill High School	Cobleskill, N. Y.	1
Colgate University	Hamilton, N. Y.	2
College of Charleston	Charleston, S. C.	1
College of Liberal Arts	Lawrence, Kansas ...	1
Columbia High School	Columbia, Pa.	3
Columbia University	New York, N. Y.	2
Columbus High School	Columbus, Ohio	1
Commercial High School	St. Petersburg, Russia	1
Commercial High School	Warsaw, Russia	1
Concordia College	Fort Wayne, Ind.	1
Conshohocken High School	Conshohocken, Pa.	3
Cornell University	Ithaca, N. Y.	5
Corry High School	Corry, Pa.	2
Cross (Mrs.) School	Louisville, Ky.	2
Crozer Theological Seminary	Chester, Pa.	1
		— 336
Darby High School	Darby, Pa.	1
De Lancey School	Philadelphia, Pa.	42
Delaware College	Newark, Del.	2
Detroit High School	Detroit, Mich.	1
Detroit Central High School	Detroit, Mich.	1
Dickinson College	Carlisle, Pa.	2
Dover High School	Dover, N. H.	1

Prepared by	Located at	No.
Doylestown High School	Doylestown, Pa.	1
Drexel Institute	Philadelphia, Pa.	22
Du Bois High School	Du Bois, Pa.	1
Duluth Central High School	Duluth, Minn.	1
Du Pont Manual Training School	Louisville, Ky.	1
Durfee High School	Fall River, Mass.	1
Duval High School	Jacksonville, Fla.	1
		— 78
East High School	Rochester, N. Y.	1
Eastburn Academy	Philadelphia, Pa.	4
Eastern High School	Washington, D. C. ...	3
East Stroudsburg State Normal School	East Stroudsburg, Pa.	1
Easttown High School	Berwyn, Pa.	2
Elmira Free Academy	Elmira, N. Y.	1
Emerson Institute	Washington, D. C. ...	2
Episcopal Academy	Philadelphia, Pa.	36
Erasmus Hall High School	Brooklyn, N. Y.	2
Erie High School	Erie, Pa.	14
		— 66
Fargo High School	Fargo, N. D.	1
Farnum Preparatory School	Beverly, N. J.	2
Franklin High School	Franklin, Pa.	4
Fresno High School	Fresno, Cal.	2
Friends' Central School	Philadelphia, Pa.	22
Friends' Select School	Baltimore, Md.	1
Friends' Select School	Germantown, Phila. ..	6
Friends' Select School	Philadelphia, Pa.	5
Friends' Select School	Washington, D. C. ...	2
Fuzok High School	Tokyo, Japan	1
		— 46
George School	George School, Pa. ...	2
Georgia School of Technology	Atlanta, Ga.	1
Germantown Academy	Germantown, Phila. ..	51
Gettysburg College	Gettysburg, Pa.	2
Girard College	Philadelphia, Pa.	3
Gloversville High School	Gloversville, N. Y. ...	1
Grand Rapids High School	Grand Rapids, Mich. ...	1
Greensburg High School	Greensburg, Pa.	1
Greensburg Seminary	Greensburg, Pa.	1
Gymnasium of Kischenev	Kischenev, Russia ...	1
		— 61
Haddonfield High School	Haddonfield, N. J. ...	1
Hanover College	Hanover, Ind.	1

Report of the Dean of the College Faculty.

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Prepared by	Located at	No.
Harrisburg High School	Harrisburg, Pa.	4
Harrison College	Barbadoes, B. W. I. ..	1
Hartford Public High School	Hartford, Conn.	2
Hatboro High School	Hatboro, Pa.	2
Haverford College	Haverford, Pa.	1
Haverford School	Haverford, Pa.	27
High School	Mayampol, Russia ...	1
Higher Normal School	Tokyo, Japan	1
Hill School	Pottstown, Pa.	2
Holderness School	Plymouth, N. H.	1
Honesdale High School	Honesdale, Pa.	1
Hopkins Art School	San Francisco, Cal. ..	1
Hornellsville High School	Hornellsville, N. Y. ...	1
Hudson High School	Hudson, Mass.	1
Hyde Park High School	Chicago, Ill.	1
		— 49
Illinois Wesleyan University	Bloomington, Ill.	1
International Correspondence School...	Scranton, Pa.	1
Ithaca High School	Ithaca, N. Y.	1
		— 3
Jackson High School	Jackson, Mich.	1
Jacob Tome Institute	Port Deposit, Md. ...	4
Jameson Avenue Collegiate Institute...	Toronto, Canada	1
Johnstown High School	Johnstown, Pa.	3
Joliet Township High School	Joliet, Ill.	1
Juniata College	Huntingdon, Pa.	1
		— 11
Keuka College	Keuka Park, N. Y. ...	1
Keystone Academy	Factoryville, Pa.	1
Keystone State Normal School	Kutztown, Pa.	1
King School	Stamford, Conn.	1
Knaben Anstalt der Bruder Gemeinde.	Neuwied, Germany ..	1
Konigliche Preussische Fachschule....	Remscheid, Germany..	1
		— 6
Lafayette College	Easton, Pa.	1
Lafayette High School	Lafayette, Pa.	1
La Salle High School	La Salle, Ill.	1
La Salle College	Philadelphia, Pa. ...	3
Lawrenceville School	Lawrenceville, N. J. .	5
Lebanon High School	Lebanon, Pa.	1
Lehigh University	South Bethlehem, Pa.	8
Livingstone College	Salisbury, N. C.	1
Lockport High School	Lockport, N. Y.	3

Prepared by	Located at	No.
Locust Dale Academy	Locust Dale, Va.	1
Louisville Girls' School	Louisville, Ky.	1
Louisville Male High School	Louisville, Ky.	2
Louisville Manual Training School	Louisville, Ky.	4
Louisville Normal School	Louisville, Ky.	1
Louisville School for Boys	Louisville, Ky.	1
Lower Merion High School	Ardmore, Pa.	4
		— 38
Maher Preparatory School	Philadelphia, Pa.	1
Manheim High School	Manheim, Pa.	1
Mansfield High School	Mansfield, Ohio	3
Manual Training High School	Indianapolis, Ind.	1
Marion Military Institute	Marion, Ala.	1
Marston's University School	Baltimore, Md.	2
Massachusetts Institute of Technology.	Boston, Mass.	2
Masten Park High School	Buffalo, N. Y.	6
Media High School	Media, Pa.	1
Melrose Academy	Oak Lane, Phila.	1
Mercersburg Academy	Mercersburg, Pa.	15
Merion Military Academy	Merion, Pa.	1
Middleboro High School	Middleboro, Mass.	1
Millersville High School	Millersville, N. J.	1
Monmouth College	Monmouth, Ill.	1
Montague High School	Montague, Mass.	1
Montclair High School	Montclair, N. J.	1
Moravian College	Bethlehem, Pa.	1
Morristown Academy	Morristown, N. J.	1
Mount Carmel High School	Mount Carmel, Pa.	1
Mount Holly Academy	Mount Holly, N. J.	1
Mount Vernon High School	Mount Vernon, Ohio.	1
Muhlenberg College	Allentown, Pa.	1
		— 46
Nagoya Commercial School	Nagoya, Japan	1
National Preparatory School	Mexico City, Mex.	1
Nazareth Hall	Bethlehem, Pa.	1
Newark High School	Newark, N. J.	2
New Britain High School	New Britain, Conn.	2
New College	Eastbourne, England .	1
New Jersey State Model School	Trenton, N. J.	1
New York High School	New York, N. Y.	1
New York State Normal School	New York, N. Y.	1
New York University	New York, N. Y.	2
Norristown High School	Norristown, Pa.	10

Prepared by	Located at	No.
Northeast Manual Training School....	Philadelphia, Pa.	72
North Denver High School	Denver, Col.	1
North High School	Columbus, Ohio	1
North Tonawanda High School	N. Tonawanda, N. Y.	2
North Wales High School	North Wales, Pa.	1
Northwestern Military Academy	Highland Park, Ill. ..	2
Norwich Free Academy	Norwich, Conn.	1
Norwich High School	Norwich, N. Y.	3
Notre Dame High School	Notre Dame, Mich. ..	1
		— 107
Ohio State University	Columbus, Ohio	1
Ohio Wesleyan University	Delaware, Ohio	1
Omaha High School	Omaha, Neb.	1
Oregon Agricultural College	Corvallis, Oregon ...	1
Ottawa University	Ottawa, Kansas	1
		— 5
Palatine Bridge High School	Palatine Bridge, N. Y.	1
Paoli High School	Paoli, Pa.	1
Passaic High School	Passaic, N. J.	1
Patterson Davenport School	Louisville, Ky.	4
Pekin High School	Pekin, Ill.	1
Pennington Seminary	Pennington, N. J.	2
Pennsgrove Grammar School	Pennsgrove, N. J. ...	1
Pennsylvania Academy of Fine Arts...	Philadelphia, Pa.	1
Pennsylvania Institute for the Instruc- tion of the Blind	Overbrook, Pa.	2
Perkiomen Seminary	Pennsburg, Pa.	1
Philadelphia College of Pharmacy	Philadelphia, Pa.	2
Philadelphia High School for Girls....	Philadelphia, Pa.	8
Philadelphia Normal School for Girls..	Philadelphia, Pa.	3
Philadelphia School for Kindergartners.	Philadelphia, Pa.	1
Philipsburg Academy	Philipsburg, Pa.	1
Phillips Brooks School	Philadelphia, Pa.	2
Phillips Exeter School	Exeter, N. H.	3
Phoenixville High School	Phoenixville, Pa.	3
Pickering College	Ontario, Canada	1
Pierce School	Philadelphia, Pa.	1
Pittsburg Academy	Pittsburg, Pa.	4
Pittsburg High School	Pittsburg, Pa.	8
Polytechnic Institute of Baltimore....	Baltimore, Md.	1
Polytechnic Preparatory School	Brooklyn, N. Y.	1
Portsmouth High School	Portsmouth, Ohio ...	1
Pottsville High School	Pottsville, Pa.	2

Prepared by	Located at	No.
Pratt Institute	Brooklyn, N. Y.	1
Preparatory School of Mexico	Mexico City, Mex. ...	1
Preparatory School of Central College	Fayette, Mo.	1
Princeton Preparatory School	Princeton, N. J.	2
Princeton University	Princeton, N. J.	4
Purdue University	Lafayette, Ind.	2
		— 68
Radnor High School	Radnor, Pa.	4
Randolph-Macon Academy	Danville, Va.	1
Rayen High School	Youngstown, Ohio ...	1
Reading High School	Reading, Pa.	6
Real Gymnasium	Munich, Germany ...	1
Red Bank High School	Red Bank, N. J.	1
Ridge School	Washington, Conn. ...	1
Rockville High School	Rockville, Conn.	3
Roman Catholic High School	Philadelphia, Pa.	3
Russian Gymnasium	Russia	1
		— 22
Salisbury High School	Salisbury, Md.	1
Saxton High School	Saxton, Pa.	1
Scranton High School	Scranton, Pa.	8
Seattle High School	Seattle, Wash.	1
Seisoku English School	Tokyo, Japan	1
Sewickley High School	Sewickley, Pa.	1
Shady Side Academy	Pittsburg, Pa.	3
Shamokin High School	Shamokin, Pa.	1
Sioux Falls High School	Sioux Falls, S. D. ...	1
Souderton High School	Souderton, Pa.	1
South Jersey Institute	Bridgeton, N. J.	1
South Manchester High School	So. Manchester, Conn.	1
South Omaha High School	Omaha, Neb.	1
State College	State College, Pa.	6
Stevens Institute of Technology	Hoboken, N. J.	1
Stiles Preparatory School	Philadelphia, Pa.	1
St. Augustine High School	St. Augustine, Fla. ...	1
St. Charles High School	St. Charles, Minn. ...	1
St. Cyril's College	Chicago, Ill.	1
St. Joseph's College	Philadelphia, Pa.	4
St. Joseph's Preparatory School	Philadelphia, Pa.	1
St. Luke's School	Wayne, Pa.	3
St. Mary's Hall	Burlington, N. J.	1
St. Paul's School	Concord, N. H.	3
Swarthmore College	Swarthmore, Pa.	2

Report of the Dean of the College Faculty.

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Prepared by	Located at	No.
Tacoma High School	Tacoma, Wash.	1
Technical Institute	Friedburg, Germany..	1
Technical Manual Training School	Cincinnati, Ohio	2
Technical School	Saxony, Germany ...	1
Temple College	Philadelphia, Pa.	3
Temple College Preparatory School....	Philadelphia, Pa.	3
Thiel College	Greenville, Pa.	1
Tokyo College	Tokyo, Japan	4
Toledo High School	Toledo, Ohio	4
Towanda High School	Towanda, Pa.	1
Tredyffrin High School	Tredyffrin, Pa.	2
Trenton High School	Trenton, N. J.	2
Trinity College	Hartford, Conn.	1
Troy High School	Troy, Ohio	1
Tyrone High School	Tyrone, Pa.	1
		— 28
Union College	College View, Neb. ..	1
University Military School	Mobile, Ala.	3
University of Colorado	Boulder, Col.	1
University of Illinois	Chicago, Ill.	1
University of Madrid	Madrid, Spain	1
University of Michigan	Ann Arbor, Mich. ...	2
University of Pennsylvania	Philadelphia, Pa.	5
University of Notre Dame	Notre Dame, Ind. ...	3
University School for Boys	Baltimore, Md.	1
University School of New Orleans	New Orleans, La.	1
Ursinus College	Collegeville, Pa.	2
Ursinus Preparatory School	Collegeville, Pa.	2
		— 23
Valparaiso College	Valparaiso, Ind.	1
Villa Nova College	Villa Nova, Pa.	2
		— 3
Walden High School	Ellenville, N. Y.	1
Walnut Hills School	Cincinnati, Ohio	1
Wauwatosa High School	Wauwatosa, Wis.	1
Warren High School	Warren, Pa.	1
Washington and Jefferson College	Washington, Pa.	2
Washington University	Washington, D. C. ...	4
Waynesboro High School	Waynesboro, Pa.	1
Wesleyan Academy	Wilbraham, Mass. ...	1
Wesleyan University	Middletown, Conn. ...	2
West Chester High School	West Chester, Pa. ...	9
West Chester State Normal School....	West Chester, Pa. ...	8

Prepared by	Located at	No.
West Des Moines High School	Des Moines, Iowa ...	2
West End High School	Buffalo, N. Y.	1
Western University	Allegheny, Pa.	1
Wilkes-Barre High School	Wilkes-Barre, Pa.	2
Wilkinsburg High School	Wilkinsburg, Pa.	2
William Penn Charter School	Philadelphia, Pa.	112
Williams College	Williamstown, Mass. .	1
Williamsport High School	Williamsport, Pa. ...	2
Williston Seminary	Easthampton, Mass. .	2
Wilmington High School	Wilmington, Del.	8
Wilmington Military School	Wilmington, Del.	2
Wilson Preparatory School	Fishkill-on-Hudson, N. Y.	2
Winthrop School	Philadelphia, Pa.	8
Wittenburg Academy	Springfield, Ohio	1
Woodbridge School	New York City, N. Y.	1
Woodbury High School	Woodbury, N. J.	1
Woodward High School	Cincinnati, Ohio	2
Woolsey School	Pittsburg, Pa.	1
Worcester Academy	Worcester, Mass.	2
Worcester High School	Worcester, Mass.	2
Wyoming College of Business	Wilkes-Barre, Pa. ...	1
		— 187
Yale University	New Haven, Conn. ..	1
Yeates School	Lancaster, Pa.	2
Yokohama Commercial College	Yokohama, Japan	1
York Collegiate Institute	York, Pa.	5
York High School	York, Pa.	7
		— 16
Privately prepared		14
Total		1357

SUMMARY.

	Number of Institutions.	Number of Students.
Colleges and Universities	55	105
High and Other Public Schools:		
Pennsylvania	60	497
New York	17	31
New Jersey	17	21
Delaware.....	1	8
Maryland	4	4
Ohio.....	9	15
Western States	30	37
New England States	13	19
Southern States	8	17
	— 159	— 649
Private Preparatory Schools:		
Pennsylvania	47	463
New York	5	7
New Jersey	10	23
Delaware.....	1	2
Maryland	4	5
Ohio.....	1	1
Western States	7	12
New England States	8	13
Southern States	5	7
	— 88	— 533
Foreign Schools, Institutions, etc.	24	28
American Technical Schools and Institutes ..	19	28
	345	1343
Privately prepared		14
Total		1357

TABLE VIII.
SCHOLARSHIPS.

	Arts.	Finance and Commerce.	Science.	Mechanical Engineering.	Civil Engineering.	Chemistry.	Biology.	Architecture.	Chemical Engineering.	Music.	Grand Total.
<i>Full Faculty Scholarships.</i>											
Post Senior			1								1
Seniors	11	1		2	4	3	3	1	2		27
Juniors	2	1		5	6	1		2	1		18
Sophomores	11	1		8	7			2			29
Freshmen	8	5		7	4		1	3	2		28
Partials		2			2						6
Second-year Special								1		1	2
Total											111
<i>Partial Faculty Scholarships.</i>											
Seniors	1				2						3
Total											3
<i>Muhr Scholarship.</i>											
Freshman.....	1										1
Total											1
<i>Penn Scholarships.</i>											
Junior				1							1
Sophomore.....	1										1
Total											2
<i>Free City Scholarships</i>											
Seniors		1		4	1		2		1		9
Juniors	2			3	4	1	3	1			14
Sophomores				2	2		2		2		8
Freshmen	3	2		3	1						9
Fourth-year Special										1	1
Total											41
<i>Pay City Scholarships.</i>											
Seniors	2			1	1						4
Juniors				2	5			1	1		9
Sophomores	2			3	1	3	1				10
Freshmen	1	1			6	1					9
Partials	2	1									3
Total											35
Totals	47	13	1	41	46	9	13	13	8	2	193

APPENDIX III.

REPORT OF THE DEAN OF THE FACULTY OF THE GRADUATE SCHOOL.

To the Provost of the University:

SIR: I have the honor of submitting herewith a report upon the work of the Graduate School during the academic year 1905-1906.

COMMITTEES.

The following members of the Faculty served during the year upon the Executive Committee:

Edgar F. Smith, Vice-Provost, *ex-officio*,
Felix E. Schelling,
Charles L. Doolittle,
John C. Rolfe,
Leo S. Rowe,
C. G. Child, Dean, *ex-officio*.

The Committee on Discipline consisted of Professor W. A. Lamberton and Professor Edwin S. Crawley.

THE FACULTY.

For promotions of members of the Faculty and Lecturers, and for a record of those absent on leave, I beg to refer to the report of the Dean of the College.

The following members of the College Faculty and others were authorized by the Executive Committee to give

instruction in the Department of Philosophy under the titles indicated :

- R. H. Hough, Ph.D., Lecturer in Physics.
- R. C. Wells, Ph.D., Lecturer in Chemistry.
- L. W. Flaccus, Ph.D., Lecturer in Ethics.
- H. L. Crosby, Ph.D., Lecturer in Greek.
- G. B. Mangold, A.M., Lecturer in Statistics.

Dr. Richard Riethmüller, Harrison Fellow for Research in Germanics, and Dr. Burnett Smith, Harrison Fellow for Research in Geology, gave instruction in accordance with the terms of their Fellowships.

At the opening meeting of the Graduate School for the present year, held October 4, 1905, the record of the past year in scientific investigation was briefly reviewed. This review appeared, by courtesy of the Editor, in the *Alumni Register*, Vol. XI, pp. 41-54. Reference is made here to this review as dealing with the year covered by this report.

FELLOWSHIPS.

Arno Poebel, Ph.D., Harrison Fellow for Research in Assyriology, was at work during the year on a series of tablets, for the most part from Nippur, dated *circa* 2200 B. C. in the reign of Hammurabi and his son Samsuiluna. Dr. Poebel has up to the present time copied and translated thirty-two of these tablets, with notes and commentary. They are written wholly in Sumerian, and are hence more valuable than those found in the northern cities of Babylonia, which are written in Semitic interspersed with Sumerian legal phrases. They will furnish, it is believed, a valuable contribution to our knowledge of the grammatical construction of the legal phraseology of this language, otherwise known chiefly through syllabaries and incoherent ex-

pressions in Semitic contracts. In addition to their philologic value, they throw a welcome light on legal procedure, for example, on the proceedings connected with the division of inheritances, the adoption of children, and the rights of eldest sons. Some, also, are important from an historical point of view, in that the formulas designating the year afford historical facts worthy of note, correcting and supplementing in important details the chronicles of the kings of Babylon, giving, for example, a more accurate idea of that period of Samsuiluna's reign to which his military enterprises belong. The results of Dr. Poebel's research will be published as Vol. VI, part II, of series A, of the "Babylonian Expedition of the University of Pennsylvania."

Clarence William Balke, Ph.D., Harrison Fellow for Research in Chemistry, was engaged upon an investigation of columbium derivatives. He made pure columbic oxide (for the first time) and converted it into its chloride in an entirely new way. The purified chloride was used in making vapor density determinations and also in re-determining the atomic weight of columbium. The oxide from the chloride was applied in a spectroscopic study on the part of Mr. Hildebrand, independently of Dr. Balke's study. Various double fluorides and peroxyfluorides were exhaustively investigated both chemically and crystallographically. Columbic acid in its alkali salts was examined and a complete series of the salts prepared, as well as a series of double metallic salts. Some fifty new derivatives have been prepared and analyzed.

Parallel with this main research, derivatives of tantalum were investigated. In many respects they were found to be perfectly analogous to the columbium compounds.

There is no question as to the simple nature of columbium. Any discrepancies heretofore noticed in its derivatives, any abnormal ratios, etc., are without question attrib-

utable to accompanying impurities. Many very interesting observations have been made by Dr. Balke, among them the fact that the hydrogen peroxide test for the estimation of traces of titanium in columbium is not reliable; in fact, is worthless, as columbium itself furnishes a similar color with the same reagent.

The investigation will be continued, as it is proposed to make it exhaustive, both for columbium and tantalum.

James Field Willard, Ph.D., Harrison Fellow for Research in European History, continued during the year the study of problems connected with direct taxation in England during the thirteenth and fourteenth centuries, on which he was engaged as Research Fellow the previous year and of which a description was given in the report for 1904-1905. The basis of the research was laid in an examination of the manuscript records of taxes in the Public Record Office and elsewhere in London during the summer recess of 1904 and the first term of the following academic year. The further collection and ordering of material occupied him till spring, at which time he began to reduce this material and his results into form for publication. He has now finished the first part of what will be a history of direct taxes in England during the fourteenth century, with an introduction upon taxation at previous periods. During the year Dr. Willard made notes for articles upon subjects connected with, but apart from, his special subject. One of these, entitled "Edward III's Negotiations for a Grant in 1337," appeared in the *English Historical Review*, October, 1906. It treats of a negotiation with the counties for a tax, the only instance known to Dr. Willard of such a negotiation during this reign. An article shortly to appear treats of certain phases of clerical taxation in Edward's reign. Two others on allied subjects are ready or nearly ready for publication. Dr. Willard hopes to have his volume on the main subject of his research ready by the

spring or summer of next year, if professional duties at the University of Colorado permit. He was elected to a chair in History at that institution last spring, and in making this report upon the second year of his Fellowship he desires to express his deep sense of indebtedness to the Provost and Board of Trustees for his appointment, and of gratitude to the Foundation on which his Fellowship stood.

Burnett Smith, Ph.D., Harrison Fellow for Research in Geology, was engaged in the study of the variations of the Eocene species of *Volutilithes*, using material from the Gulf States, France and England. Dr. Smith made use of collections in a number of institutions, including the Wagner Free Institute of Science, the American Museum of Natural History, Cornell University and Columbia University. The material which yielded the most interesting results forms part of the Isaac Lea collection of Eocene Mollusca in the Academy of Natural Sciences of Philadelphia, the extended series of individuals from nearly every important collecting ground in the South furnishing exceptionally excellent opportunities for working out the evolutionary changes which have affected the species and races throughout the Eocene. Dr. Smith's study seemed to confirm the views advanced in his thesis for the Doctorate on "Senility among Gastropods." Two well-defined evolutionary tendencies were made out in the case of *Volutilithes petrosus*. One tendency results in abnormal senile forms which pursue a rapid evolution and are soon eliminated from the geological record. These abnormal forms can be definitely correlated with conditions prevailing in the Lignitic sea. The other tendency is illustrated in the main stock of the species which flourished under more typically marine conditions and enjoyed a much longer geological range. The results obtained in a study of the material from the Alabama and Tombigbee sections in Alabama, and from

some Mississippi localities, were embodied in a paper entitled "Phylogeny of the Races of *Volutilithes petrosus*," published in the *Proceedings* of the Academy of Natural Sciences of Philadelphia for March, and at present illustrations are being made for an unfinished paper dealing with the forms from Louisiana, Arkansas and Texas. The completeness of the collections and the excellent preservation of the material, together with the fact that this branch of Palæoconchology has been much neglected, add materially to the interest and value of the results obtained.

Richard Riethmüller, Ph.D., Harrison Fellow for Research in Germanic Languages, was engaged throughout the year with various studies connected chiefly with the hitherto unpublished letters discovered by him in Germany the previous year. The list of his publications is as follows:

"Gleim and Schiller," *German American Annals*, Vol. VII, No. 6.

"Schwaebisches: Supplement to the Schiller Centenary," *ib.*, Vol. VII, No. 6.

"Frankfurt and Cassel in Goethe's Time," *ib.*, Vol. VII, No. 10.

"Walt Whitman and the Germans," *ib.*, Vol. VIII, Nos. 1, 2, 3. Also separately printed, Philadelphia, 1906.

"Franz Michael Leushsenring's Expulsion from Berlin, May 25, 1792," *ib.*, Vol. VIII, No. 5.

"Johann Wilhelm Ludwig Gleim's Imitations of the [MHG.] Minnesong," Philadelphia and Stuttgart, 1905.

"Ludwig Fulda's Place and Influence in German Literature," *Alumni Register*, May, 1906.

"Ludwig Fulda: Ein Lebensbild," *Philadelphia Demokrat*, February 18, 1906.

During the year Dr. Riethmüller delivered lectures in Philadelphia upon "Ludwig Fulda's Place in German Lit-

erature," "The German Fairy Tale," and "The German University" and upon "The American University" at the University of Berlin, University of Leipzig, University of Tübingen, University of Technology at Stuttgart, and before the Conference of Lutheran Ministers at Göppingen.

Frederick Maria Urban, Harrison Fellow for Research in Psychology, was engaged upon a series of experiments with the pneumograph, the immediate purpose of which was a study of the relation of the pneumographic curves to the plethysmographic curves, the more remote purpose being the study of the influence of effective mental processes on circulation. The results obtained prove the changes of the plethysmographic curves known as variations of the basal line to be dependent on respiration. The first step in the investigation was the study of the so-called "respiration waves." It was found that the size of these waves depends not only on respiration, but also on the height of the single pulse waves. This observation is of some importance, as it confirms the observations of Lehmann, but contradicts the results of several other investigators, one of whom, Martins, made an attempt recently to explain these undulations of the plethysmographic curve in an entirely different way. Beside these waves of relatively short length longer undulations were observed which apparently do not show any periodicity. It is doubtful whether they depend on the pneumographic curve. It was suspected that these long undulations were identical with the Traube-Hering waves, and an attempt was made to obtain experimental evidence for this supposition. No definite conclusion was reached by the close of the year. In addition to these experiments, an experimental study was made on the discrimination of lifted weights by the method of right and wrong cases. Two points are of essential importance in the application of this method: (1) Are the different groups of results independent of each

other? (2) Does the distribution of the results follow the law of Gauss? The first problem is of great importance because similar questions arise in almost every statistical investigation. The study of this point was successful in that it led to the discovery of a method which permits an answer to this question in any case. This method will be the subject of a paper which will be ready for the press in a short time. The problem of the applicability of the law of Gauss could not be taken up until the present year. Dr. Urban also pursued studies of a different kind, the results of which are embodied in a paper on "Kant's Doctrine of the Thing in Itself," shortly to appear in the *Kantstudien*.

The Board of Trustees created six University Fellowships for Research for the year. The names of the appointees follow, with an abstract of their reports upon their work for the year:

George Daniel Luetscher, Ph.D., University Fellow for Research in American History, was engaged in an investigation of the history of political machinery in the United States, an extension of the subject of his thesis for the Doctorate, "Early Political Machinery in the United States." His work during the year was limited to the tendencies in legislation touching reforms in election methods in the several States to which such reform has been chiefly confined during the last decade. He codified the most advanced laws relating to personal registration, primary elections and general election, the bulk of the work being done at the expense of the Committee of Seventy of Philadelphia and while he was serving as Secretary of the Pennsylvania Joint Committee on Election Code. This work was the basis of the personal registration and uniform primaries act passed by the special session of the Legislature during the year, the preliminary work of drafting these

bills falling largely to Dr. Luetscher. The privilege of attending the meetings of the committees contributed materially to Dr. Luetscher's success in advancing his work.

Frank Julian Warne, Ph.D., University Fellow for Research in Economics, continued his labors of the previous two years in the investigation of conditions affecting the coal industry. His second volume on this subject appeared during the year. It is included with fuller reference in the following list of his published work for the year:

"The Labor Situation in the Anthracite Coal Industry," *The Outlook*, December, 1905.

"The Miners' Union: Its Business Management" and "Slavs in Coal Mining," being two chapters in Commons's "Trade Unionism and Labor Problems," Ginn & Co., New York, 1905.

"The Coal Mine Workers: A Study in Labor Organization," 12mo, 252 pages, Longmans, Green & Co., New York, December, 1905.

"Birthplace of the American Railroad," *Railway World*, January 5, 1906.

"Early Railway Competition with the Canals," *Railway World*, January 5, 1906.

"The Impending Crisis in the Coal Situation," *Philadelphia Public Ledger*, February 11, 1906.

"The Reading System: Its Organization and Its Control," *Philadelphia Public Ledger*, March 4, 1906.

"Mine Labor Conditions in West Virginia," *The Outlook*, March, 1906.

"Miner and Operator: A Study of Labor Conditions in the Anthracite Coal Fields," *The Outlook*, April, 1906.

"The Suspension of Coal Mining," *Philadelphia Public Ledger*, April 1, 1906.

"The Anthracite Coal Strike of 1902," *Railroad Gazette*, April 13, 1906.

"A Ton of Anthracite," *The Outlook*, April 21, 1906.

"Railway Control of Coal Mining," *The Outlook*, May, 1906.

"The Trade Agreement in Five Great Industries," *The National Civic Federation Review*, July, 1906.

Dr. Warne has now turned to another line of work, and, in making his report, which concludes three years' connection with the University as Research Fellow, desires to express his deep appreciation to you, sir, and to the Board of Trustees, who have honored him with three successive appointments.

John Louis Haney, Ph.D., University Fellow for Research in English, prepared during the year an extensive bibliography of John Donne, including editions of his works and critical references, to be published as an appendix to Dr. Martin G. Brumbaugh's thesis, "The Poetry of John Donne," in the *Publications of the University*. He published during the year an article on "John Donne's* *Polydoron*," and a review of the revised edition of Sidney Lee's "Life of Shakespeare," both in *Modern Language Notes*, and a volume on "The Name of William Shakespeare" (Philadelphia, 1906, pp. 70), a study of the orthography of Shakespeare's name. He also gathered considerable material for a bibliography of editions of Shakespeare, with which he will be engaged during the coming year.

Charles Wharton Stork, Ph.D., University Fellow for Research in English, was at work abroad on his edition of five plays of William Rowley. One of these, "All's Lost by Lust," he will edit from the quartos of 1633, in the University Library. Of four, "A New Wonder, A Woman Never Vex't" (1632), "A Match at Midnight" (1633), "A Shoemaker, a Gentleman" (1638), "The Birth of Merlin, or The Child hath found his Feather" (1662), he had photo-

* Not to be confused with Dr. John Donne, on whom Dr. Haney also worked.

graphic facsimiles made, while abroad, in the Bodleian Library. These five plays were scrupulously collated with all the other copies discoverable in the Bodleian, British Museum, the Dyce Collection at the South Kensington Museum, and the Capell Collection in the Library at Trinity College, Cambridge, the variants proving few and important. Fresh light on the dramatic style of Rowley came from the reading of "A Shoomaker, a Gentleman," by W. R., leading Dr. Stork to change his opinion with regard to the authorship of "A New Wonder." Agreeing with Professor Schelling as to the exclusive authorship by Rowley of "A Shoomaker, a Gentleman," Dr. Stork was led by the similarity of Rowley's style in that play to Heywood's to surrender his belief in the partial authorship by Heywood of "A New Wonder." Dr. Stork also went into the subject of sources, and developed his introduction treating of Rowley's place in the drama. His edition of the plays, with introduction, notes and glossary, will be ready for the press at the end of the present academic year.

James Walker Downer, Ph.D., University Fellow for Research in Latin, was occupied during the year with an elevation of his thesis, "Figurative Language in the Satirae of Petronius." He also attended during the year a number of courses in the Department of Classical Languages, which he was unable to take during his period of study for the Doctorate.

Isaac Husik, Ph.D., University Fellow for Research in Philosophy, continued his study of Aristotle. He published in the April number of *Mind* the article, "Aristotle on the Law of Contradiction and the Basis of the Syllogism," referred to in the report of last year, and in March, at Leyden, his thesis in its completed form on "Judah Messer Leon's Commentary on the *Vetus Logica*." He also continued his studies in medieval, more especially Jewish, philosophy, one work in anticipation being a monograph on

Levi ben Gerson, a Jewish philosopher and Aristotelian commentator of the fourteenth century, the completion of which will necessitate a period of two years and extended research in European libraries, as almost all the commentaries of Levi ben Gerson on Aristotle are in manuscript.

On October 30, 1905, the Provost gave the Executive Committee permission to use more freely its discretionary power in permitting Fellows in Course on the Harrison Foundation to give instruction—with the proviso, however, that the amount of instruction should not exceed four hours a week, and that, in passing upon applications, the Dean should have the power of veto. The permission thus extended was in response to an inquiry on the part of the Committee as to how far it might be wise to exercise this power. Teaching, it was felt, is one of the most effective means by which a student may himself learn; furthermore, his chances of obtaining a position, or a better position, are very greatly improved if he shall have practical experience. It was felt, on the other hand, that a Fellow who desired to devote himself wholly to study should, without question, have this right reserved to him. In this latter connection, the following regulations were adopted by the Executive Committee, in addition to those suggested by the Provost: (1) Permission to teach should be granted for the benefit of the Fellow and not for the relief of his department; (2) he should not be under obligation to teach, as are the Fellows for Research, when required by the Chairman of their Group Committees; (3) permission must be asked in the first place of the Executive Committee and in the second place of the Academic Council.

STUDENTS.

Degrees were conferred upon fifty-two students, twenty-four receiving the degree of M.A. and twenty-eight that of Ph.D. A table showing the number of degrees conferred

in the past years will be found appended to this report, and also a list of the candidates who received a degree, with a note of their present occupations and of the details of the theses submitted by those who attained the Doctorate. It will be seen that the number of graduates receiving appointments to responsible academic positions is, as heretofore, large.

EDUCATION.

In the last report the action of the Board of Trustees was recorded establishing, under suitable restrictions, courses open to the attendance at the same time of graduates and undergraduates. Approximately twenty-five courses of this character, in History, Mathematics, Economics, Sociology, Political Science, Commerce and Transportation, Psychology, Botany, and Zoology, are now included in the curriculum. No additional legislation proved necessary except certain regulations adopted by the Executive Committee for its guidance in the admission of courses to this standing. As was anticipated, no difficulty has attended the introduction of these joint courses.

At the stated meeting of the Faculty the Executive Committee submitted for approval a resolution to the effect that holders of the Doctorate be permitted to take special work in the department free of tuition charges, but not of other charges. This resolution was approved by the Faculty, and afterwards received the approval of the Provost, with the proviso that, if the number of applications ran above ten, the fact should be reported for his consideration. The condition which led to this action was the desirability of extending the privileges of the University to our own graduates, and also by courtesy to holders of the degree of Doctor of Philosophy conferred by institutions of a character satisfactory to the Executive Committee, that they might have

the opportunity to take courses which through some accident they were unable to take as students, to keep their knowledge of their subjects abreast of the progress of science, to recover facility in investigation, and to receive fresh stimulus to original research.

ADMINISTRATION.

On recommendation of the Faculty, at its stated meeting, the Board of Trustees approved in June a change of the title of the "Department of Philosophy" to "Graduate School." The propriety of the former title was fully recognized, but the change seemed advisable for practical reasons, the term "Graduate School" being that generally employed by American universities, and the title "Department of Philosophy" being frequently confused with that of the department of instruction in the College and Graduate School having Philosophy in its specific sense as its subject.

At the opening meeting of the year a new regulation came into force which rendered it obligatory upon holders of Fellowships and Scholarships to register upon the opening day, failure to do so operating to vacate their benefices. This regulation served the purpose for which it was designed of effecting more prompt registration. Whereas approximately sixty students registered on the opening day the previous year, one hundred and fifty-seven registered last year, and, it may be added, one hundred and eighty-five this year.

By direction of the Provost, a general meeting of the Department was held on September 29, 1905, in the Auditorium of Houston Hall, to inaugurate the work of the new year. In the absence of the Provost, due to a passing illness his address of welcome was read by the Vice-Provost; a review of the scientific work of the Department during the previous year was made, under direction of the Executive

Committee, by the Dean, and the formal address of the occasion—to the informing and inspiring nature of which the tributes of the audience and a special vote of thanks of the Executive Committee bore witness—was delivered by Professor William Romaine Newbold on “The Ideals of the Graduate School.” A reception to the new students followed. The attendance upon the meeting was large, and it was felt that its object had been satisfactorily fulfilled. The addresses and review of the work of the year appeared in the *Alumni Register*, Vol. X, pp. 49-73. The purpose of the Executive Committee in placing the review of the work for the year upon the program was not, it may be added, to emphasize the importance of the work, or still less the contributions of individual members of the Department, but to give some idea of its scope and to manifest its spirit and intention. It is hoped that such reviews, if approved and continued, may prove in some measure a source of inspiration and fulfil a useful service as an historic record.

On January 9, 1906, a letter from the Provost under date of December 9, 1905, was reported to the Executive Committee, formally establishing, by appropriation from the income of the George Leib Harrison Foundation, a Special Fund of \$5,000, available in part or in whole until August 31, 1907, for the purchase of books, the appropriation being made in the furtherance of one of the four purposes of the Foundation, namely, the enlargement of the resources of the Library by enabling its acquisition of works of permanent scholarly value. Bearing in mind the several instructions in this letter with regard to the distribution of this Fund, especially that aid be given where it might be most needed, the Committee adopted the following plan: (1) The appropriation of \$2,000 for works of general value to several departments or to all, to be expended by the Dean under the advice of the Executive Committee; (2) an

assignment to each department of a sum, determined on a unit system, representing its equity or special need, such sums totaling \$2,400, to be expended directly by the several departments under approval of signatories appointed in each department; (3) the reservation of the balance, amounting to \$600, to provide for specially profitable purchases that might offer themselves during the term of the fund or for cases where purchases of departments might necessarily run slightly in excess of their specific assignments. As the term of the appropriation does not expire till August 31, 1907, a full report of the action thus far taken will not be made, but a reference to the creation of the Fund is proper here to commemorate the benefits which have accrued from its creation and the sincere appreciation expressed by the Faculty in respect to this most recent contribution to the resources of the School and the University on the part of the generous Foundation which bestowed it.

STATISTICS.

The tables of registration appended at the end of the report represent the corrected totals for the year. The total number registered (301) represents a gain of 32.6 per cent. In number of regular students (excluding Research Fellows and auditors) the gain was 34.2 per cent. The number of auditors was 18 as against 16 the previous year, and the number of students absent on leave for the year was 23 as against 19 the previous year. The number of auditors being practically the same, it follows that the gain was confined to the body of regular students. From the table showing the number of degrees conferred in successive years, it will be seen that a larger number of degrees were conferred last year than at any previous period in the history of the Department. The steady growth of previous years has, in brief, continued, and indicates that the work of the University in

this, as in other fields, is receiving each year more general recognition. A natural expression of pleasure at this proof that the faithful labors of Faculty and Administration for many years are meeting with their merited response does not imply forgetfulness of the fact that statistical totals and percentages are but a rough index of truly effective usefulness. They measure current activity, but only remotely and in an untrustworthy way the substantial value of what results from it. A certain average of ability in the student body may be maintained, whatever its increase, by stringent requirements for admission, rigorously applied, but the true test of usefulness is the character and achievement of those that go out as graduates; the standard by which any industry may properly be judged, the quality of the finished product, is not gauged by its receipts of raw material of whatever grade. In this connection it need hardly be said that there is little danger that increased numbers may lead the members of the Faculty to grow apathetic and cease to regard each individual student as an individual problem, an individual responsibility, or permit any degree conferred to represent a more or less mechanical discharge of minimum requirements. Yet it is none the less gratifying that abundant testimony, direct and indirect, comes to us that our graduates are justifying their promise in earnest and capable service, whether as teachers or investigators.

If, soberly judged, the work of the School seems a good and useful work, it is permissible to consider the question of the extension of its usefulness. At this point in its development a truth of primary importance becomes ever more worthy of attention, that extension of usefulness can only with constantly decreasing correctness be measured by continuous increase in gross registration. The only safe criterion is the progressive development of each department toward its full possibilities of usefulness. Increased gross

registration may mean development in a number of departments only, not a proportionate increase in all; indeed, it is even possible that numbers may increase in a single department to an amount disproportionate to its resources and prove a source of weakness, not of strength. At this time, more imperatively than ever, is it necessary in planning for further development, more extended usefulness, to consider the several departments separately—to ask the question in regard to each whether the work it does is commensurate with its resources, or, on the other hand, whether its resources may not need to be better adjusted or in some way strengthened. Each department should be considered in relation to those essential factors on which usefulness depends—the number of instructors, the amount and nature of the other duties these perform, their professional ability and attainment, their devotion to this part of their work, the freshness, vitality and enthusiasm of their teaching, the economy of the curriculum offered, the harmonious relation and correlation of men and courses in a particular subject with those in allied subjects, the character of the provision made for the subject concerned in the way of books and other equipment. Only by such a determination is true advance made possible—a detailed analysis such as is always necessary to effect substantial improvement in any complex whole. The result of such a scrutiny would be not merely the discovery at what points improvement is possible, or merely, indeed, the bringing up of each department, considered in itself, to a certain general standard of excellence. In point of fact, the strength of any department is directly conditioned by the strength of the departments allied to it in subject and, at a further remove, by that of every department, whatever its subject.

Before closing, a brief reference may perhaps be permitted to a movement now, it would seem, taking form in

action, connected with the work of the graduate school in the training of teachers. In America the graduate school fulfils two functions, the training of teachers and the training of investigators. Should not our graduate schools, it is asked, recognize the needs of students desiring training as teachers, and that only by defining special courses for this purpose and signalizing their completion by a special degree? The subject was treated in certain relations some years ago in a paper read before the Association of American Universities by Professor Judson, then Dean of the Graduate School, now Acting President, of the University of Chicago. Professor Newbold made reference to it in one of his reports and in his address at the opening of last year; members of our Faculty have urged its consideration as the result of independent reflection; letters have come from other institutions asking for information concerning our practice; articles dealing with it have appeared in the educational periodicals; and action which recognized the point at issue has been taken in at least one institution. The nature of such special courses for intending teachers is not here in question—presumably they would be largely didactic in character, with a sufficient amount of training in investigation to ensure independence of judgment. It must first be asked whether such courses are necessary or desirable. Without going into argument, it may be noted that the consensus of opinion of those who have studied the matter is that, both for educational and practical reasons, such courses would be desirable. At all events, the question is being considered elsewhere, and may well be considered here. There is further the question of the degree appropriate to such courses. This is not merely the incidental detail it might seem. The suggestion has been seriously offered that the Master's degree be used to denote general culture only, that the Doctorate be made by express defini-

tion a teacher's degree (on the ground that it is practically that at present), and that a new degree, that of University Doctor, similar to the French and Russian Doctorates, and carefully safeguarded from cheapening, be given for superlative ability and achievement in investigation. The unpracticality of the suggestion is obvious, but the conviction which inspired it of the need of a special degree is to be respected. The final solution probably, judging from present indications elsewhere, will be the giving of a narrower definition to the Master's degree, or, as may better be said, a restoring to it of its former significance. This has, indeed, been done, though perhaps not in set terms, at the University of Chicago, where a difference is made between "specialized" and "unspecialized" degrees. In point of fact, what does the Master's degree at present stand for? The student who takes it for general culture may be left out of consideration. The degree either marks a half-way stage to the Doctorate, taken as still of value because of its traditions and as a pleasant thing to have, or it is taken because the student cannot complete his course for the Doctorate, or fears he may not complete it, and therefore secures this lesser good as a professional asset. In the latter relations the degree justifies its existence, but it may well be asked why it might not be made in a special use, expressly stated in the terms under which it is conferred, what it originally was, a teacher's degree, representing, and defined as representing, such command of a subject or group of subjects as should qualify the recipient to teach in a certain range of academic appointment.

A table appended to this report shows the number of Master's degrees conferred in this School in the past sixteen years, analyzed to indicate the number of persons who proceeded and did not proceed to the Doctorate. Up to and including 1902, of 59 persons receiving the Master's degree

37 discontinued work, at least here. In the last four years the number of degrees conferred has more than doubled. Even if a substantial allowance be made for students who may resume work, the number remains high, say 50 or more out of 121. The candidates with at most but one or two exceptions took the degree of necessity or voluntarily as a teaching degree, and the totals and their ratio to the totals of degrees conferred may with confidence be construed as indicating that the specific appropriation of the degree (under one definition at least) to this special use would be desirable, not only as rendering it more valuable by giving it an explicit meaning, but also because it would meet the needs of a number of persons who otherwise could not enter upon graduate work at all. The large relative proportion of women, considered in relation to the fact that the number of regular women students in the School at its highest has been about 20 per cent, and only of late years, points the same way, and also possibly the character of the subjects taken by those who discontinued work after receiving the degree. To sum the matter briefly, the higher degrees are, in fact, if not primarily in theory, professional degrees and are taken with a professional purpose. At present the Master's degree has not, as it should have, a generally recognized, specific, professional connotation.

The question, it should be observed in conclusion, is not merely one of speculative or academic interest. It is worthy of serious consideration as involving a practical educational issue and offering a possible opening for an extension of the usefulness of this and of other universities where it is at present, or may shortly be, under consideration.

Respectfully submitted,

C. G. CHILD,
Dean.

I. REGISTRATION.

	NEW STUDENTS.	Research Fellows.	Students holding a Baccalaureate Degree.	Auditors.	Total.
1905-06		1	126	14	141
1904-05		1	87	13	101
1903-04		7	84	12	97
1902-03		2	78	10	90
1901-02		1	86	4	91
	OLD STUDENTS.				
1905-06		11	145	4	160
1904-05		8	115	3	99
1903-04		11	95	4	110
1902-03		9	99	6	114
1901-02		8	78	14	100
	TOTALS.				
1905-06		12	271	18	301
1904-05		9	202	16	227
1903-04		12	179	16	207
1902-03		11	177	16	204
1901-02		9	164	18	191

The following table shows the number of women in the Department for the last ten academic years :

	1896-97	1897-98	1898-99	1899-00	1900-01	1901-02	1902-03	1903-04	1904-05	1905-06
Regular students	13	18	21	32	27	31	37	34	36	55
Auditors	14	18	11	12	9	4	6	7	9	15
	—	—	—	—	—	—	—	—	—	—
	27	36	32	44	36	35	43	41	45	70
Percentage of regular women students to total of regular stu- dents	12	14	16	23	18	18	20.9	19	15.1	20.5
Percentage of total number of women to total number of stu- dents	15	22.5	20	25	20	18.5	21	19.8	19.8	23.2
Percentage of women auditors to total num- ber of auditors	17.5	30	46	33	36	22	37.5	43.1	56.3	83.3

II. INSTITUTIONS REPRESENTED.

	A.B.	B.S.	Other Bacca- laureate Degrees.	Master's Degrees.	Ph.D.	Theo- logical Degrees.
Allegheny College . . .	2					
Amherst . . .	1	1		1		
Anatolia College (Mar- sovan, Turkey) . . .	1					
Brown . . .	3		1			
Bryn Athyn . . .	1					
Bryn Mawr . . .	2			1		
Bucknell . . .	6			2	D.Sc.	
California . . .				1		
Calvin College . . .	1			1		
Carleton . . .		1				
Carlton . . .		1				
Chicago . . .	1		2	1		1
Colgate . . .	1			1		
Colorado . . .				1		
Columbia . . .	2			1		
Cornell . . .	3					
Dartmouth . . .			1	1		
Delaware . . .	2					
Dickinson . . .	8			3		
Drew . . .						1
Drury . . .	1					
Earlham . . .			4			
Franklin and Marshall . . .	4		1	3		
Georgia School of Technology . . .		1				
Georgia University . . .	1					
Gettysburg . . .	1					1
Gianbattista Vico Col- lege, Chieti, Italy . . .	Grad.					
Gustavus Adolphus . . .	1					
Hamilton . . .			1			
Harvard . . .	7			3		
Havana . . .	Grad.					
Haverford . . .	3	2				
Heidelberg . . .	1					
Hiram . . .	1					
Illinois . . .	1					
Illinois Wesleyan . . .			1			
Indiana . . .	2			1		
Iowa . . .	1	1	1	2		
Johns Hopkins . . .	2					
Juniata . . .	1					
Karls Gymnasium . . .	Grad.					
King's College, N. S. . .	1			1		1
Knox . . .		1				
Lafayette . . .	5			1		
Lebanon Valley . . .	2			1		

II. INSTITUTIONS REPRESENTED.—*Continued.*

	A.B.	B.S.	Other Bacca- laureate Degrees.	Master's Degrees.	Ph.D.	Theo- logical Degrees.
Lehigh.....	1	1				
Maine.....		1				
Marietta.....	1			1		
Michigan.....	3					
Missouri.....	1			1		
Moscow Imperial School.....	Grad.					
Muhlenberg.....	2			1		
New York University.....	2		2			
Northwestern.....		1	1	1		
Oberlin.....	3			1		1
Ohio Northern.....		1		1		
Ohio State.....	1		1			
Ohio Wesleyan.....		1		1		
Pennsylvania.....	32	50	2	23	12	
Pennsylvania College.....	2			1		
Pennsylvania College for Women.....	1					
Philadelphia Divinity School.....						2
Polytechnic Institute, Blackburn, Va.....	1			1		
Princeton.....	8			3		
Radcliffe.....	3			2		
Real Gymnasium, Switzerland.....	Grad.					
Richmond.....	1					
Roanoke.....	1			1		
Rochester.....	1					
Smith.....	1		2			
St. Andrew's, Scotland.....	Grad.					
St. Hyacinthe, P. Q.....	Grad.					
St. Joseph's.....	2			1		
Swarthmore.....	4		2	2		
Temple College.....	9	11				
Tennessee.....	1					
Texas.....		1		1		
Tokyo Higher Com- mercial College.....	1					
Toronto.....	1					
Union Theological Seminary.....						1
Ursinus.....	7			1		
Vassar.....	2					
Vienna.....					1	
Virginia.....	1			1		
Waseda University, Tokyo, Japan.....	1					

II. INSTITUTIONS REPRESENTED.—*Continued.*

	A.B.	B.S.	Other Bacca- laureate Degrees.	Master's Degrees.	Ph.D.	Theo- logical Degrees.
Washington College...	1			1		
Washington and Jefferson	1			1		
Washington and Lee..	1					
Washington University				1		
Wellesley.....	6					
Wells.....	1					
Western Maryland ...	1			1		
Wilson.....	2					
Wisconsin.....	1		3	2		
Woman's College of Baltimore.....	3					
Yale.....	2		1		1	

Total number of degrees.....	385
Graduates of Foreign Institutions	7
Repeated.....	392
	109
Auditors	283
	18
	301

III. ELECTIONS OF REGULAR STUDENTS.

	1896-97		1897-98		1898-99		1899-00		1900-01		1901-02		1902-03		1903-04		1904-05		1905-06	
	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.	Maj.	Min.
Anthropology and Ethnology.....																				
Astronomy.....	4	3																		
Biology.....			4	1	3	4	6	4			1	3	1	3	1	4	4	3	3	3
Botany.....																				
Zoology.....	2	1	4	3	5	3	5	3	8	4	8	4	8	3	4	3	5	9	7	14
Chemistry.....	3	6	5	0	7	8	5	3	0	7	4	6	4	6	3	3	5	11	4	17
Classics.....	13	3	18	19	12	18	15	22	12	20	28	22	35	19	25	15	15	23	30	30
Greek.....																				
Latin.....	2	7	4	6	5	6	5	5	4	11	8	7	2	9	4	10	5	18	2	10
Classical Archaeology.....	3	2	3	4	7	4	5	6	5	8	3	12	6	7	6	4	12	16	12	1
Economics, etc.....																				
Economics.....	6	16	5	12	7	8	5	8	9	12	6	10	4	11	14	5	18	13	18	12
Political Science.....	4	7	2	4	1	4	3	5	4	5	5	6	4	10	4	7	13	8	18	18
Sociology.....																				
Transportation and Commerce.....			1		3	4	7	5	5	8	6	7	7	4	5	4	4	9	20	17
English.....																				
English Literature.....	4	10	7	11	13	5	14	3	17	6	18	3	22	5	10	6	31	6	40	27
English Philology.....																				
Geology and Mineralogy.....	6		7	1	11		1	10		15	3	15		22		15	1	18		31
Germanics.....	1	18	1	17			6	3	8	2	5	4	6	3	6	6	12	4	6	16
History.....	1	2			1	5	6	8	6	11	8	10	14	10	13	11	8	15	20	16
American History.....	4	11	6	6	9	9	7	8	5	13	5	12	3	13	4	10	9	12	14	8
American Constitutional History.....																				
European History.....	2	3	1	1	1	1	1	1				1		2		1		3	2	7
Indo-European Philology.....	6	8	4	13	6	14	4	8	6	10	8	7	10	8	9	4	8	7	13	7
Mathematics.....	3	3	1	4	1	5	2	4	3	2	3	3	1	2	2	1	2	2	2	
Philosophy, etc.—	4	2	3	8	6	7	6	8	9	10	6	5	5	8	7	7	4	11	8	17
Ethics.....																				
Pedagogy.....	4	9	1	5		4		4		4		8		8		9		3		3
Philosophy.....	11	7	4	8	8	0	0	2	7	5	12	5	16	6	13	10	21	11	94	21
Psychology.....	9	26	8	15	4	14	5	8	7	13	14	15	19	23	12	18	10	12	10	17
Physics.....	2	10	3	8	6	2	4	4	3	8	5	12	4	18	10	18	6	20	10	23
Romanics.....	1	3	2	6	2	3	1	4	7	4	5	5	5	4	9	4	11	6	14	14
Semitics.....	2	4		6	3	0	2	8	4	0	4	10	8	13	5	8	4	7	0	11
Minors not yet elected.....	7	9	10	8	4	5	4	3	8	11	11	10	10	12	11	11	11	11	7	6
Totals.....	91	182	94	188	120	240	122	244	142	284	164	328	173	346	177	354	215	381	285	382

IV. DEGREES CONFERRED SINCE OPENING OF DEPARTMENT.

Year	PH.D.			M.A.			M.S.			Total
	Men	Women	Total	Men	Women	Total	Men	Women	Total	
1889	1	.....	1	.....	.....	.....	.....	.....	.....	1
1890	1	.....	1	.....	.....	.....	.....	.....	.....	1
1891	7	.....	7	1	.....	1	.....	.....	.....	8
1892	4	1	5	.....	.....	.....	.....	.....	.....	5
1893	13	.....	13	2	2	4	.....	.....	.....	13
1894	9	3	12	3	2	5	.....	.....	.....	17
1895	14	2	16	1	1	2	1	.....	1	19
1896	16	2	18	6	4	10	1	.....	1	29
1897	21	3	24	2	.....	2	.....	.....	.....	26
1898	21	3	24	1	2	3	2	.....	2	29
1899	17	3	20	4	.....	4	1	.....	1	25
1900	14	1	15	8	3	11	1	.....	.....	26
1901	19	6	25	.....	3	3	.....	.....	.....	28
1902	13	1	14	6	2	8	.....	.....	.....	22
1903	27	2	29	9	3	12	.....	.....	1	42
1904	15	3	18	5	5	10	1	.....	1	29
1905	24	2	26	11	4	15	.....	.....	.....	41
1906	23	5	28	16	5	21	1	2	3	52

V. MASTER'S DEGREES, 1891-1906.

Under the heading "Major Subjects," the chief subjects taken by recipients of the degree are indicated with the number taking each subject. A subsequent numeral indicates the subjects taken by those who discontinued work after receiving the degree:

YEAR.	Master's Degrees.			MAJOR SUBJECTS.	Continued toward Ph.D.			Discontinued Work after taking A.M.		
	Men.	Women.	Total.		Men.	Women.	Total.	Men.	Women.	Total.
1891	1	..	1	Semitics, 1	1	..	1	..	..	..
1892	1	..	1	Philosophy, 1-1	..	..	..	1	..	1
1893	2	2	4	Classics, 1 Philosophy, 2-1 English, 1	1	2	3	1	..	1
1894	4	2	6	Chemistry, 1 History, 3-3 English, 1 Mathematics, 1	3	..	3	1	2	3
1895	2	1	3	Mathematics, 2-1 English, 1	1	1	2	1	..	1
1896	7	4	11	Botany, 3-3 History, 2-1 Classics, 2-1 Philosophy, 2-1 English, 2-2	2	1	3	5	3	8
1897	2	..	2	History, 1-1 Philosophy, 1-1	..	..	..	2	..	2
1898	2	2	4	Economics, 1 Mathematics, 1-1 Germanics, 1-1 Pedagogy, 1-1	1	..	1	1	2	3
1899	5	..	5	Classics, 1-1 History, 1 Botany, 1-1 Philosophy, 1 Economics, 1-1	2	..	2	3	..	3
1900	8	3	11	Economics, 1-1 Mathematics, 2-1 Classics, 1-1 Philosophy, 1-1 English, 1-1 Romanics, 1 Germanics, 1-1 Zoölogy, 1-1 History, 2-2	1	1	2	7	2	9
1901	..	3	3	Economics, 1-1 Romanics, 1 English, 1-1	..	1	1	..	2	2
1902	6	2	8	Chemistry, 1 History, 3-3 Economics, 1 Pedagogy, 1 Germanics 2-1	4	..	4	2	2	4
1903	9	2	11	Chemistry, 5-4 Mathematics, 1 English, 1 Romanics, 1-1 Germanics, 1 Zoölogy, 2-1	4	1	5	5	1	6
1904	7	5	12	Chemistry, 2 Mathematics, 1 Classics, 1 Pedagogy, 1 English, 4-1 Zoölogy, 1-1 History, 1 Economics, 1-1	7	2	9	..	3	3
1905	11	4	15	Chemistry, 1-1 Mathematics, 1-1 Classics, 3-1 Pedagogy, 1 Economics, 1 Physics, 1 English, 4-3 Romanics, 1 Germanics, 2	8	1	9	3	3	6
1906	17	7	24	Chemistry, 1-1 Physics, 1 Classics, 4-1 Psychology, 2-1 Economics, 3-1 Romanics, 3-1 English, 3-1 Semitics, 1 Germanics, 1 Zoölogy, 3 History, 2-2	13	3	16	4	4	8
Sixteen Years	84	37	121		48	13	61	36	24	60

VI. HIGHER DEGREES GRANTED, COMMENCEMENT DAY,
1906.

MASTER OF ARTS.

Winifred Austin, A.B. (Brown, 1898) : Hebrew.

Resumes teaching, Ogontz School, Ogontz, Penna.

Thomas Bruce Birch, A.B., A.M. (Pennsylvania College,
1891, 1904) : Classical Languages.

Resumes graduate work.

Wilton Wallace Blancké, A.B. (Pennsylvania, 1905) : Clas-
sical Languages.

Resumes graduate work.

John David Brooks, A.B. (Dickinson, 1901) : Psychology.
Milford, Delaware.

Frederic Anthony Child, A.B. (Pennsylvania, 1905) :
English.

Resumes graduate work.

Harold Sellers Colton, B.S. (Pennsylvania, 1904) : Zoology.
Resumes graduate work.

Maturin Marie Dondo, A.B. (Pennsylvania, 1905) :
Romanics.

Absent on leave, studying abroad.

Iola Kay Eastburn, B.L. (Swarthmore, 1897) : Romanics.
Resumes graduate work.

Cloyd Benton Ewing, A.B. (Pennsylvania, 1905) : Eco-
nomics.

Mount Union, Pennsylvania.

Allison Gaw, B.S. (Pennsylvania, 1900) : English.
Resumes graduate work.

John Ezra Hoyt, A.B. (Ursinus, 1904) : Physics.
Resumes graduate work.

Joseph Wolstan Huff, A.B. (Pennsylvania, 1905) : History.
331 Dickinson Street, Philadelphia.

Edmée Caroline Lorenz, B.S. (Pennsylvania, 1903):
Romanics.

3314 Woodland Avenue, Philadelphia.

Edward Preston Moxey, Jr., B.S. (Pennsylvania, 1903):
Economics.

Resumes graduate work.

Abraham Linford Myers, A.B. (Lafayette, 1902): Clas-
sical Languages and Pedagogy.

Resumes graduate work.

Ezra Weston Pound, Ph.B. (Hamilton College, 1905):
Romanics.

Resumes graduate work.

Warren Daub Renninger, A.B. (Columbia, 1901): Eco-
nomics.

Resumes graduate work.

Henrietta Gibbon Stratton, A.B. (Michigan, 1904): His-
tory.

Instructor in History, Western College for Women,
Oxford, Ohio.

Lewis Burtron Hessler, A.B. (Pennsylvania, 1905): Clas-
sical Languages.

Instructor in Classics, University of Michigan.

Alfred Henry Stroh, A.B., B.Th. (Bryn Athyn College,
1899; Theological Seminary of the New Church,
Bryn Athyn, 1902): Psychology.

Absent on leave, studying abroad.

Helen Cameron Thomas, A.B. (Pennsylvania College for
Women, 1904): English.

411 Franklin Avenue, Wilksburg, Penna.

MASTER OF SCIENCE.

Hannah May Blake, B.S. (Pennsylvania, 1905): Zoology.
Resumes graduate work.

Lucy Middleton Griscom, B.S. (Pennsylvania, 1903);
Chemistry.

253 South Seventeenth Street, Philadelphia.

Dunlap Jamison McAdam, A.B., A.M. (Washington and
Jefferson, 1897, 1900); Chemistry.

Resumes graduate work.

DOCTOR OF PHILOSOPHY.

Samuel Goodwin Barton, A.B. (Temple College, 1903):
Astronomy.

Thesis: *Secular Perturbations arising from the
action of Saturn on Mars, an application of the
method of Louis Arndt.*

Harrison Fellow for Research in Astronomy.

Arthur Clinton Boggess, A.B. (Illinois, 1902): American
History, Political Science.

Thesis: *Settlement of Illinois, 1778-1830.*

Professor of History and Political Science, Pacific Uni-
versity, Forest Grove, Oregon.

Arthur Cleveland, A.B., A.M. (Pennsylvania, 1904, 1905):
English and Latin.

Thesis: *Cibber's Revision of Shakespeare's Richard
Third.*

252 South Twenty-first Street, Philadelphia.

Virginia Judith Craig, A.B., A.M. (Drury, 1901; Wash-
ington University, 1904): Latin, Greek, Classical
Archæology.

Thesis: *Martial's Wit and Humor.*

Instructor in Classics, State Normal School, Spring-
field, Missouri.

James Pyle Wickersham Crawford, A.B. (Pennsylvania,
1902): Romanics.

Thesis: *The Life and Work of Christobal Suarez
De Figueroa.*

Instructor in Romanics, University of Pennsylvania.

Benjamin Franklin Finkel, B.S., M.Sc., A.M. (Ohio Northern University, 1888, 1891; Pennsylvania, 1904): Mathematics.

Thesis: *Determination of all Groups of Order 2^m which contain Cyclic Self-conjugate Sub-groups of Order 2^{m-1} and whose Generating Operations Correspond to the Partitions $(m-4, 4)$, $(m-4, 3, 1)$.*

Professor of Mathematics and Physics, Drury College.

Anna Lockhart Flanigen, Certificate in Chemistry (Pennsylvania, 1878): Chemistry.

Thesis: *The Electrolytic Determination of Copper in an Alkaline Cyanide Electrolyte.*

Professor of Chemistry, Mount Holyoke College.

Benno Humbert Alfred Groth, A.B., A.M. (Harvard, 1902, 1903): Botany, Zoology.

Thesis: *The Sweet Potato, Origin and History, Economic Value, Structure, and Classification of Varieties.*

Mandador, Experimental Farm of the United Fruit Company, Zent, Costa Rica.

Samuel B Heckman, Ph.B., A.B., A.M. (Earlham, 1893; Harvard, 1894; Pennsylvania, 1905): Germanics, Romanics, Pedagogy.

Thesis: *The Poetry of the Dunker Bishop Alexander Mack.*

Instructor in German, College of the City of New York.

Joel Henry Hildebrand, B.S. (Pennsylvania, 1903): Chemistry.

Thesis: *The Determination of Anions in the Electrolytic Way.*

Studying abroad, University of Berlin.

William John Hinke, A.B., A.M. (Calvin College, 1890, 1893): Semitics.

Thesis: *A New Boundary Stone of Nebuchadrezzar I.*

University Fellow for Research in Semitics.

John Coulter Hockenberry, A.B. (Indiana, 1899): Pedagogy, Psychology, Sociology.

Thesis: *The Rural School in the United States.*

Instructor in Psychology and Pedagogy, State Normal School, California, Penna.

Chester Lloyd Jones, B.L. (Wisconsin, 1902): Political Science, Economics, Sociology.

Thesis: *The Consular Service of the United States; its History and Activities.*

Harrison Fellow for Research in Political Science.

Edith Dabele Kast, A.B., A.M. (Marietta, 1902; Pennsylvania, 1903): Astronomy, Mathematics, Physics.

Thesis: *The Mean Right Ascensions and Proper Motions of 130 Stars.*

University Fellow for Research in Astronomy.

Margaret Rose Kollock, A.B. (Woman's College of Baltimore, 1900): European History, American History, English Literature.

Thesis: *The Mayor and Aldermen of London during the Tudor Period.*

Returns to do special work.

1926 Spring Garden Street, Philadelphia.

Louis Krautter, Jr., B.S. (Pennsylvania, 1902): Botany, Geology.

Thesis: *The Genus Pentstemon.*

Instructor in Botany, University of Pennsylvania.

Julia Langness, B.S. (Carleton College, 1901): Chemistry.

Thesis: *A New Form of Anode in Electro-analysis and the Rapid Electrolytic Determination of Certain Platinum Metals.*

Instructor in Chemistry, Fargo College, Fargo, N. D.

Jesse Francis McClendon, B.S., M.S. (Texas, 1903, 1904):
Zoology, Physiology, Botany.

Thesis: *On the Development of Parasitic Copepoda.*

Instructor in Zoology, University of Texas.

Fayette Avery McKenzie, B.S. (Lehigh, 1895): Economics.

Thesis: *The North American Indians of To-day
and their Contact with the White Race.*

Assistant Professor of Economics and Sociology, Ohio
State University.

Louis John Paetow, B.L., M.L. (Wisconsin, 1902, 1903):
History, Latin.

Thesis: *The Arts Course at the Medieval Universities,
with Especial Reference to Grammar and Rhetoric.*

Instructor in European History, University of Wisconsin.

Arno Max Emil Poebel, Graduate, Karl Friedrich Gymnasium in Eisenach: Semitics.

Thesis: *Twenty-six Old Babylonian Legal Documents.*

Harrison Fellow for Research in Assyriology.

Henry Baruch Sachs, B.S., A.M. (Pennsylvania, 1900,
1905): Germanic Literature, Philology, English
Philology.

Thesis: *Heine in America.*

Returns to do special work.

924 North Franklin Street, Philadelphia.

Allen Anders Seipt, B.S., A.M. (Pennsylvania, 1900, 1903):
Germanics, Pedagogy.

Thesis: *The First Printed Hymn-Book of the
Schwenkfelders and its Sources.*

Instructor in German, Ohio Wesleyan University.

Arthur Guy Terry, Ph.B., Ph.M. (Northwestern University, 1901, 1902): European History, American History, Political Science.

Thesis: *The Spirit of Propagandism in the French Revolution, 1789-1793.*

Instructor in History, Northwestern University.

Walter Sheldon Tower, A.B., A.M. (Harvard, 1903, 1904): Political Science, Transportation and Commerce.

Thesis: *A Regional and Economic Geography of Pennsylvania.*

Instructor in Geography, University of Pennsylvania.

Charles Travis, B.S. (Pennsylvania, 1902): Mineralogy, Geology, Mathematics.

Thesis: *Pyrite from Cornwall, Lebanon County, Pennsylvania.*

Instructor in Mineralogy, University of Pennsylvania.

Ellwood Austin Welden, B.S. (Pennsylvania, 1903): Indo-European Philology, Romanics, Arabic.

Thesis: *The Samkhya-Karikas.*

Fellowship, Harvard University.

Luther Ferree Zerr Witmer, Ph.B. (Franklin and Marshall, 1904): Chemistry.

Thesis: *The Electrolytic Determination of Tin and its Separation from Antimony with a Rotating Anode.*

Instructor in Chemistry, Drexel Institute, Philadelphia.

APPENDIX IV.

REPORT OF THE DEAN OF THE FACULTY OF LAW.

To the Provost of the University:

DEAR SIR: I have the honor to submit the following report for the year ending August 31, 1906:

REGISTRATION OF STUDENTS.

The number of students as compared with the number of students registered during the scholastic year 1904-05 is as follows:

1904-05.		1905-06.	
First year	133	First year	146
Second year	81	Second year	95
Third year	68	Third year	64
Specials	15	Specials	13
Partials	6	Partials	4
<hr/>		<hr/>	
303		322	

The conditions remaining the same as during the previous year, the increase is, of course, gratifying.

On February 16th, on recommendation of the Faculty of the Department, the Trustees approved a change in our entrance requirements. Hereafter all students registering in the Department must be at least twenty years of age. This requirement will, of course, temporarily affect our numbers, as nearly one-third of our present students were, on entering, below twenty years of age; but the Faculty believe that it is the most important step forward which has been taken

by the Department for a number of years. We have found by experience that to admit men below twenty is to have in each class a group of individuals who, with rare exceptions, are not capable of doing the required work of the course in a satisfactory manner, and who therefore retard the progress of the older students. We have also found that, as a class, men who graduate under twenty-three years of age are not able to attract business or secure advantageous positions in the larger law offices, and that therefore to admit a student under twenty to the Law Department does not enable him to reach a self-supporting position at the Bar at an earlier period than if he is obliged to delay entering on his legal studies until he is at least twenty years of age.

CHANGES IN THE TEACHING FORCE.

On December 29, 1905, Judge J. I. Clark Hare, Emeritus Professor of Law, died at his home at Radnor, Pennsylvania. Judge Hare was in the ninetieth year of his age. He graduated in the College Department, receiving the degree of Bachelor of Arts, July 31, 1834. In 1837 the University conferred upon him the degree of Master of Arts. In 1858 he became a Trustee of the University; a position he retained until 1869, when he was appointed to a professorship in the Law Department. In this year he received from the University the degree of Doctor of Laws. He conducted the courses in Contracts and Constitutional Law in this Department until his retirement and election as Emeritus Professor in 1889. Though Judge Hare's judicial services were confined to the Common Pleas Court of Philadelphia, on account of his reputation, his decisions are cited in all parts of the United States. Indeed, it may be truthfully said that no judge of a court of first instance is as frequently quoted as Judge Hare. In spite of this unique judicial reputation, it is probable that his name will in the

future be best remembered by the profession as a result of his professorship in the Law Department, for in connection with his work as professor, he published works on Constitutional Law and on Contracts, both of which have become standard treatises. His work on Contracts has the distinction of being the first legal work on a subject of private law in which modern scientific methods of historical research were applied to the elucidation of the history of law.

For many years the senior professor in the Law Department has been Mr. George Tucker Bispham. Mr. Bispham died at Jamestown, Rhode Island, on July 29, 1906. He was born in this city on May 24, 1838. He came to the Bar in 1861. He rose rapidly in his profession, and for the last twenty-five years of his life was one of the acknowledged leaders of the Bar. In 1883 he was elected to a Chair in this Department. For many years he taught the subject of Equity, and his book on "The Principles of Equity" has been since its publication, and is probably destined to remain a leading elementary text book on that subject. From 1886 to 1891 he was Dean of the Department. In 1898 the volume of his private business, and the fact that he was no longer a young man, obliged him to curtail to a comparatively small volume his work in this Department. Last spring, on account of his health, he tendered his resignation to the Board of Trustees, which was regretfully accepted by them. While his principal lifework was in the active practice of his profession, his services to this Department were many and significant. His legal literary labors and the legal literary labors of the late Judge Hare made this Law School familiar to the profession throughout the United States.

At the November meeting of the Faculty, Mr. Charles L. McKeehan, Lecturer on Bills and Notes, presented his resignation. Mr. McKeehan had been connected with the

Department since his graduation in 1900 as Fellow and Lecturer. His work in Bills and Notes was acceptable alike to the Faculty and students, and we regret that the increased pressure of his private business has obliged him to relinquish his work with us. The course in Bills and Notes was, in consequence of his resignation, suspended during the year. It will be taken next year by Professor Crawford D. Hening.

MATTERS PERTAINING TO THE COURSE.

The course of the first and second years, with the exception of the course in Bills and Notes, above mentioned, was the same as during the preceding year. In the third-year course all electives heretofore offered were given, besides which Professor Hening conducted a course in Equity Pleading and Practice one hour a week, and a course on Suretyship one hour a week.

Voluntary courses were given during the year on the Trial of Causes, by Mr. Russell Duane; on Road Jury Practice, by Mr. J. Lee Patton; on Mining Law, by Mr. John Stokes Adams; and on Conveyancing, by Mr. Horace Stern. All these courses were well attended, and the Faculty is convinced that the opportunity thus afforded to gain information on the subjects treated is of great practical use to the students, while at the same time the character of the subjects is such that to offer them as regular courses counting toward a degree would not be advisable.

Besides these lectures on what we may call practical subjects, I am glad to be able to report that Mr. Henry Flanders gave a course of twelve legal-biographical lectures, as heretofore, the persons treated of being mainly deceased associate justices of the United States Supreme Court. The lectures were popular with the student body; and, being well attended, are of distinct educational value.

The annual address was delivered by the Honorable

Walter Clark, Chief Justice of North Carolina, on April 27th. Judge Clark's paper was on "Some Defects in the Constitution of the United States." He handled his subject in an able and original manner, and the address attracted wide attention throughout the United States. The Society of the Alumni of the Department of Law tendered a reception to Judge Clark, which, as usual, was held immediately after the address in the main hall of the Law School Building.

BIDDLE MEMORIAL LIBRARY.

The accession number on August 31, 1905, was 33,311. The accession number to-day is 37,800, or an increase of 4,489. This increase is divided as follows:

Reports	2,346
Text Books	1,375
Digests	61
Statutes	247
Encyclopædias	16
Periodicals	211
Ordinances	46
Bar Association Reports	17
Public Documents	158
Dictionaries	13
Trials	2
Biographies	97
	<hr/>
	4,489

The large increase this year is due to the gift of the law library of the late Mr. Richard C. McMurtrie, by his daughters, Miss Ellen McMurtrie, Miss Mary McMurtrie, Miss Elizabeth McMurtrie and Mrs. Charles B. Wright. The library numbered 3,018 volumes. Two thousand four hundred and sixty-two (2,462) have already been placed upon the accession list. These consist of the United States Reports, a set of Pennsylvania Reports, a set of Massachu-

setts Reports, partial sets of New Jersey and New York Reports, the English Reporters, and the English Law Reports. While we possessed copies of all these reports, on account of the large demand for them, the fact that we now, as a result of this gift, possess duplicate sets, increases, to a marked extent, the efficiency of the Library. The gift also includes a large number of treatises and a number of volumes of the year books, the edition being earlier than the edition known as the standard edition, which is now somewhat discredited. They are printed by such publishers as Tothill, Wight, Wetswyert and the Compagne of Stationers. It is needless to say that these books are of great value in historical legal work.

Another gift of importance was that of Mrs. Herbert Washington, who presented the library of her husband, Mr. Herbert Washington, a member of the class of 1875. This library numbered 367 volumes, 330 of which have been placed upon the accession list. The greater number of these books are represented by a complete set of Pennsylvania Reports in excellent condition.

We also received, as we have for a number of years past, a large number of donations from members of the Bar, the most interesting of which was an old manuscript treatise on the Court of Star Chamber, presented by Mr. John F. Lewis.

There were 168,434 books taken out by undergraduates in Sharswood and McKean Halls. This is an increase of more than 10 per cent over the number taken out during the preceding year. The use of McMurtrie Hall for graduate study and original work has greatly increased. There has also been a very notable increase in the use of the Library by undergraduates of the College Department. Though no exact record is kept of the number of books taken out in McMurtrie Hall, as the persons using that hall have direct

access to the shelves, it is estimated that during the season there are 32,000 books used in this hall, making a total for the Library during the eight months of the scholastic year of 200,000, or an average of 1,000 books a day. The Library is the workshop of the school, and this enormous total is the best evidence of the large amount of work done. The Library is, of course, open during the summer, and is in constant use by members of the Bar. It is also used in the summer by undergraduates engaged in writing theses. None of the resident professorial force are in the habit of remaining in the city during the summer, but many of them take away with them a large number of books. This use of the Library has been encouraged, and the Librarian has instructions to send to persons engaged in original legal work text books, and even sets of reports, where this can be done without crippling the efficiency of the Library to those who desire to work in Philadelphia during the vacation season.

PRIOR EDUCATION OF STUDENTS.

The following is a tabulated statement of the education of the first-year class, candidates for a degree, prior to entering the Department:

Candidates who held College degrees	54
Candidates who had been members of the Junior Class in a college of standing	5
Candidates who had been members of the Sophomore Class in a college of standing	7
Candidates who had been members of a Freshman Class in a college of standing	15
Candidates who were graduates of high or normal schools.	33
Candidates who had passed examinations in subjects not covered by a diploma from high or normal schools....	2
Candidates who passed the entrance examinations	10
Candidates who entered on the certificate of the Pennsylvania State Board of Law Examiners	20

GEOGRAPHICAL DISTRIBUTION OF STUDENTS.

The States represented in the Department were as follows :

Colorado	1	New Jersey	23
Delaware	2	New York	3
District of Columbia.....	2	Oklahoma	1
Georgia	1	Pennsylvania, not including	
Illinois	1	Philadelphia	125
Kansas	1	Philadelphia	152
Kentucky	1	Virginia	1
Massachusetts	2	West Virginia	2
Maryland	3	Panama	1

SUMMARY.

New England States'.....	2	Pennsylvania, including Phila-	
Middle States	31	delphia	277
Western States	4	Foreign countries	1
Southern States	7		

AGE OF STUDENTS.

The average of the entering class was slightly lower than that of the previous year, being twenty-one and one month as compared with twenty-one years and six months for 1904-05.

RESULTS OF EXAMINATIONS IN COURSE.

Of the 276 regular students taking the June examinations, 41, or 14 per cent plus, failed to pass a sufficient number of examinations to obtain higher standing; or, in the case of the third-year class, to graduate. Of these 41, 24 were members of the first-year class, 11 of the second-year class and 6 of the third-year class. The figures are below those of the previous year, when 15 per cent plus, of all who took the examinations, failed. The average examination

mark given last year was 75.4; during the previous year, 74.4.

Of the 24 members of the first-year class who were dropped, 11 have re-registered; of the 11 men dropped from the second-year class, 7 have re-registered; and of the 6 men of the third-year class who were dropped, 3 have already satisfied the requirements for the degree. Every year a large number of first-year students who register with us withdraw during the year or fail to take the examinations. Last year, for instance, out of the 151 students registering in the first-year class, 34 failed to take the examinations. The following reasons have been given for withdrawal or failure to take the examinations:

Number giving up study of law to enter other professions or business	7
Number transferred to Wharton School	1
Number withdrawing to prepare for preliminary examination of State Board	8
Number withdrawing on account of illness	8
Number withdrawing without explanation and failing to reply to letters of inquiry	8
Number dropped for non-attendance	1
Number dropped for non-payment of fee	1

Of these 34 men, 10 have re-matriculated for the coming year. The Faculty will be greatly disappointed if the percentage of those withdrawing during the year or failing to present themselves for examination will not be reduced next year as the result of the new requirement keeping out all men under twenty years of age.

SCHOLARSHIPS.

There were eight holders of Faculty Scholarships and six holders of City Scholarships. All these scholarships

carry full tuition. The total assistance given amounted to \$2,240.

PUBLICATIONS OF THE DEPARTMENT.

During the past year, besides the publication of the members of the teaching force, there have been published under the auspices of the Department three monographs: one by the Honorable Walter Clark, Chief Justice of North Carolina, on "Some Defects in the Constitution of the United States;" another by Mr. Boyd Lee Spahr, of the class of 1904, on "The Liability of Corporation Promoters to Account for Profits;" and a third by John Marshall Gest, of the class of 1882, on "The Laws and Lawyers of Sir Walter Scott."

PHYSICAL HEALTH OF THE STUDENT BODY.

In my last annual report I pointed out that our professional students were in need of one or more playgrounds, where those who had not the ability or time to join a University or class athletic team could secure exercise out of doors. Last fall a committee of the Faculty and students applied to the Board of Trustees for permission to use the lot immediately to the west of the Law School Building as a tennis field. The Trustees granted permission, with the proviso that the lot could be used at any time by the corporation for other University purposes. The committee raised the necessary amount of money, about \$4,000, to grade the land, fence it and prepare the surface for six tennis courts. They also placed in the basement of the Law School Building a shower bath and lockers. The courts have been in constant use since the 27th of April. They are, of course, open to any member of the teaching force or student body of the University. Their nearness to the Law School Build-

ing makes it easy for our students, without great loss of time, to secure a half hour or more of good, hard exercise, and I believe that the result will be a distinct improvement in the physical health of those who take reasonable advantage of this new feature of our University life.

WILLIAM DRAPER LEWIS,
Dean.

APPENDIX V.

REPORT OF THE DEAN OF THE FACULTY OF MEDICINE.

To the Provost of the University:

DEAR MR. PROVOST: In my report to you a year ago I called your attention to the importance of raising the requirements for admission to the Department. The Medical Council was much gratified that its recommendation in regard to this matter met with your sympathetic approval, as well as the official sanction of the Board of Trustees. By this wise provision of the Board, students who enter upon the study of Medicine under our auspices will have had two years of a collegiate training, and, what is of equal importance, must have acquired a knowledge of the fundamental principles of biology, chemistry and physics. The requirements for admission to our Medical School have now been raised to the grade of the leading medical schools in this country, Great Britain and the Continent. While great benefits will thus be derived by the Department as a whole, still greater benefits will accrue to the student. The study of Medicine is in large measure a scientific study, and the student's mind must be trained in the ways of the scientist, which are essentially those of observation and of logical deduction from facts observed. Unless these habits of mind have been acquired before he enters upon the study of Medicine, the student will not be able to understand or appreciate the prescribed studies of his early medical training.

I should like to lay stress upon one aspect of the func-

tion of a medical department, which seems to be less appreciated and carried out by those responsible than the routine and practical side of the work. No institution deserves to be recognized as a great center of learning unless it is contributing constantly its share to the sum of scientific progress. The foundation of the new laboratories would not have justified the enormous outlay of money had they not been intended to serve as a stimulus to the Medical Faculty to enter with greater zeal the pursuit of scientific investigation. It is gratifying to report, Mr. Provost, that during the past few years there has been an evident growth of this spirit which is just beginning to bear fruit. Among the investigations which have been conducted during the past year may be included the following:

From the Laboratory of Anatomy:

- Investigation of the Development of the Brain. By Dr. Ewing Taylor.
- Sensory Nerve Endings in Muscles. By Dr. Addison.

From the Hare Laboratory of Chemistry:

- Investigation as to the Composition of Rattlesnake Venom. By Dr. John Marshall.
- The Influence of the Gases of the Atmosphere and of Bacteria in Producing Rancidity in Olive Oil. By Dr. John Marshall and L. Ryan.
- The Occurrence of Copper in the Liver of Adults and in Still-born Children. By Dr. L. A. Ryan.
- The Lloyd Reaction for Morphine Applied to the Alkaloids. By Dr. Daniel W. Fetterolf.
- The Recovery of a Mixture of Morphine and Hydrastine from Animal Tissues and its Behavior to the Lloyd Reaction. By Dr. D. W. Fetterolf.
- The Composition of the So-called Diabetic Foods of Commerce. By Dr. D. W. Fetterolf.

A Study of the Chemical Composition of the Hair of Different Races. By T. A. Rutherford and P. B. Hawk.

Does Cod-Liver Oil Contain Alkaloids? By Dr. P. B. Hawk.

The Rate of Excretion of Potassium Iodide by the Salivary Glands. By Dr. John T. Thompson.

Influence of Ether Anæsthesia upon Metabolism. By Dr. P. B. Hawk.

Morphological Changes in the Blood Incident to Fasting. By Dr. P. B. Hawk.

Influence of Copious Water Drinking on the Excretion of Chlorides and Uric Acid by Man. By Dr. S. A. Rulon.

Series of Feeding Experiments on Eck Fistula Dogs. By Dr. P. B. Hawk.

Cryoscopic Examination of Human and Dog's Urine Before and After the Establishment of Eck's Fistula. By Dr. C. N. Sturtevant.

From the Physiological Laboratory:

The Crystallography of Hæmoglobins. By Dr. Edward T. Reichert and Amos P. Brown.

The Physiological Action of Saline Solutions. By Drs. Edward Lodholz and H. T. Alburger.

From the Laboratory of Hygiene:

Studies of the Principles Involved in Phagocytosis. By Dr. D. H. Bergey.

The Nature of Tonsillar Infections. By Dr. Nathaniel Gildersleeve.

From the Laboratory of Experimental Pathology, under the direction of Dr. Leo Loeb:

Cause and Conditions of Growth of Tumors.

Causation of Edema.

Experimental Lesions of Blood-Vessels and their Probable Cure.

Growth of Normal Tissues in Regeneration and After Transplantations.

Causes of Cell Necrosis.

Coagulation of the Blood and Thrombosis.

Influence of Roentgen Rays on Organs.

Experimental Studies on Ovaries and Uterus.

Influence of Light on the Vitality of Cells.

Microchemical Studies on Cell Granula.

Studies on Anemia in Animals.

From the Laboratory of Neuropathology:

Investigation into the Causes of Conjugate Deviation of the Eyes. By Dr. T. H. Weisenburg.

Physiological Study of the Sensory Area of the Brain, and of the Function of the Frontal Lobe. By Drs. Charles K. Mills and T. H. Weisenburg.

Investigation into the Pathology of Paralysis Agitans By Dr. Carl D. Camp.

Study of the Effect of Traumatism upon the Spinal Cord and Spinal Column, with the Aid of a New Stain. By Dr. Alfred R. Allen.

The Etiology of Hydrocephalus. By Drs. William G. Spiller and Alfred R. Allen.

Clinico-pathological Study of Syringomyelia. By Mr. H. S. Hutchinson.

Hemiplegia without Gross Organic Lesions. By Dr. J. H. W. Rhein.

Some Peculiar Pathological Changes Occurring in Meningomyelitis and Hemorrhage of the Oculomotor Nerves. By Dr. William G. Spiller and Eva Rawlings.

The Effects of Palliative Operation for Brain Tumors. By Drs. William G. Spiller and Charles H. Frazier.

Nerve Transplantation for Lesions of the Spinal Cord and Brain. By Drs. William G. Spiller and Charles H. Frazier.

Pathological Study of Syringomyelia Extending into the Basal Ganglia. By Dr. William G. Spiller.

Pathological Study of Multiple Motor Neuritis. By Dr. William G. Spiller and Dr. W. T. Longcope.

From the Laboratory of Surgical Pathology and Experimental Surgery:

Investigation as to the Pathogenesis of Biliary Calculi. By Dr. George P. Müller.

Histological Study into the Regeneration of Tendon Tissue. By Dr. George P. Müller.

Experimental Study of Ascending Tubercular Infections of the Urinary Tract. By Dr. John Speese.

Investigation into the Nature of Bone Regeneration. By Dr. Henry S. Wieder.

A Study of the Effects and Nature of Intracranial Tension in Experimentally Produced Brain Tumors. By Dr. Charles H. Frazier.

Transplantation of Organs and Anastomosis of Blood-Vessels. By Dr. George M. Dorrance.

Hyperacidity of Gastric Secretions. By Dr. Wolf.

An Investigation into the Histogenesis of Mixed Tumors. By Dr. John Speese.

Serial Study of the Histology of the Appendix, with Especial Reference to the Lymphoid Tissue and Musculature. By Drs. George P. Müller and B. A. Thomas.

Bone Regeneration in Cavities Filled with Horsley's Wax. Mr. Magnuson ('08) for Dr. Müller.

From the William Pepper Laboratory of Clinical Medicine:

The Effect of the X-Ray upon Metabolism. By Dr. David L. Edsall.

The Nature of Atrophy of the Intestinal Organs. By
Dr. David L. Edsall.

The Opsonic Index in Acute Surgical Infections. By
Dr. B. A. Thomas.

Every encouragement in the way of material and equipment has been provided. Through the generosity of Mr. Henry Charles Lea and the late Mr. Henry C. Gibson, in 1891 a Laboratory of Hygiene was erected and equipped and opportunities provided for research work. In 1892 the late General Isaac Wistar founded the Wistar Institute of Anatomy and Biology, so liberally endowed as to provide for the prosecution of advanced work on the most comprehensive scale. The William Pepper Laboratory was established for the express purpose of providing facilities for the prosecution of minute clinical studies and original researches. Finally, in 1904, that great monument to medical science, the Laboratories of Physiology, Pathology and Pharmacology, was dedicated to the teaching and development of these sciences. With such a heritage, it is the bounden duty of each and every one enrolled as an officer in the department to contribute something, be it large or small, which will in some measure justify the confidence of those who entrusted to our care and use these splendid opportunities.

Under present conditions provision has been made for the pursuit of knowledge that pertains wholly to the human subject. Anatomy, physiology and pathology are studied solely with reference to the structure, function and diseased condition of man. This, however, is but one aspect of nature. The close analogy and relationship which exist between man and the rest of the animal kingdom, as well as the vegetable kingdom, should prove conclusively that their study in comparison with those branches already estab-

lished is essential to the full comprehension of this great subject. Other branches of knowledge, such as religion, history and economics, have long tried and benefited by comparative study, and if it could be established in medical science the profession and the public would alike feel the great advantage thus obtained. We have in our institution a school of veterinary medicine which should co-operate with us in securing the comparative study of our respective branches and welcome as would we the extension of the field of activities, which would come to our respective departments. I therefore recommend to you, Mr. Provost, the creation of Chairs of Comparative Anatomy, Physiology and Pathology.

With reference to the conduct of the department, it is becoming increasingly difficult for the Dean to exercise proper supervision over its affairs. When the Medical School was in its infancy, and the number of courses and instructors few, it was a simple matter for the Dean to keep in close touch with it and where necessary direct its affairs. The system of instruction is now so elaborate and the corps of instructors so large that this is well-nigh impossible. No matter how much time the Dean devoted to his official duties it would be impossible for him to deal intelligently with the affairs of every branch of instruction. If he were a chemist his advice would be of little value in matters pertaining to surgery, and *vice versa*. In order to maintain a standard of efficiency commensurate with our facilities and equipment, the department should be subdivided according to subjects or group of subjects and the head of each sub-department should be held responsible for its efficiency in every particular. Such division of responsibility exists to-day, but in theory rather than in practice. I have recommended to the Medical Council, therefore, that the department be reorganized on this plan. The exercise of necessary super-

vision would naturally fall to the senior professor of the respective departments. In the major laboratory branches such an arrangement would be perfectly feasible, inasmuch as the professor gives his entire time to the school, and is always on the ground. When we come to the major clinical branches we are confronted with difficulties because the senior professor and his associates are engaged in active practice and their time is so taken up that they can only afford to devote to the interests of the school the few hours a week prescribed for their lectures. I cannot but feel that with such limited supervision the efficiency of the course suffers to no small degree. These apparently insuperable difficulties must be met in the future by the appointment of at least one major officer in both the medical and surgical divisions, who, as in the laboratory branches, will be required to devote at least a greater part of his time and efforts to the active supervision over the innumerable details of the modern elaborate system of instruction.

A committee of the Faculty has had under consideration the question of adding a fifth year to the course leading to the degree. It was proposed that the candidate must spend this year as a hospital interne, or, failing to receive a hospital appointment, in post-graduate work. The desirability of every graduate spending at least one year in a hospital before entering upon the practice of medicine or even engaging in scientific pursuits is fully appreciated. The committee realized the difficulty, however, of enforcing such a regulation and, in so far as our own graduates are concerned, the necessity for such a regulation is minimized by the fact that, under existing circumstances, so large a percentage voluntarily devote one or more years to hospital work. Of the last graduating class 88 per cent had secured, mostly by competition, hospital appointments. This, so far as I know, is the best record that has ever been attained, and deserves special commendation.

During the past year among many visitors who have come from far and near to see our department and study its methods and results, I wish to make special mention of Baron Takaki, the ex-Surgeon General of the Japanese Navy and the President of the Tokio Medical School, who lectured to our students and professed himself much interested, not only in the Medical Department, but in the whole University. Dr. Purves Stewart, one of the most eminent neurologists in Great Britain, delivered an instructive lecture to the graduating class. Mr. Charles Ballance, celebrated for his activity in the field of neurological surgery, and his brother, Mr. William Ballance, of London, were entertained at the Surgical Clinic of the University Hospital.

I wish to record the establishment of a department of Experimental Surgery, under the direction of Dr. J. Edwin Sweet, who will take up his duties at the beginning of the academic year as an Associate in Experimental Surgery. Dr. Sweet, who will supervise the research work carried on by the members of our surgical staff, comes to us directly from the Rockefeller Institute, although he is well known to the members of the University family for the excellent work which he did a few years ago in the Laboratory of Hygiene.

During the past year we lost by resignation the services of Dr. Robert Formad, who for almost twenty years devoted his entire time to the department as Demonstrator of Normal Histology. Mr. William N. F. Addison, M.D., has been appointed as his successor. In recognition of his faithful and creditable record, Dr. A. O. J. Kelly was promoted from an Associate to an Assistant Professor of Medicine.

There are certain facts in the registration statistics which may be of interest. Thirty-five more students were registered in the department than in the preceding year. Of fifty States and Territories in the Union there were represented thirty-seven. There were nineteen registrations

from foreign countries, including two students from the Philippine Islands. Through the sympathy and co-operation of one of our graduates in that field preliminary arrangements have already been made with St. John's College, Shanghai, China, to admit their students next year to our senior or post-graduate classes. It is a source of satisfaction to note an increase of 25 per cent in the registration from Southern States, the total number of students from these States numbering 44.

Of the total number of students in course for the degree 168 students, or 30.6 per cent, held College degrees; 28, or 5 per cent, had been members of junior and senior classes in colleges of standing, and 87, or 16 per cent, had been members of the freshman or sophomore classes. The statistics published in Table III might be offered as an argument in favor of the advantages of collegiate training. In the first year there were but 40 per cent of men who had had such advantages, in the second year 53 per cent, in the third year 55 per cent, and in the fourth year 62 per cent. Thus, in the course of four years, the class gained 22 per cent in the percentage of college men, and it may be assumed that a corresponding percentage of men without collegiate training, being unable to continue with their respective classes, were dropped.

TABULATED STATISTICS.

TABLE I.

Post-graduate	18
Fourth year	109
Third year	131
Second year	137
First year	172
Special	12

TABLE II.

	4th	3d	2d	1st
Candidates who held College degrees	39	52	42	35
Candidates who had been members of a Senior Class in a college of standing	2	..	..	7
Candidates who had been members of the Junior Class in a college of standing	7	4	3	5
Candidates who had been members of the Sophomore Class in a college of standing.	14	6	10	8
Candidates who had been members of the Freshman Class in a college of standing	5	10	19	15
Candidates who had passed the entrance examinations	8	7	3	4
Candidates who had passed examinations in subjects not covered by diplomas from high school or normal school	3	..	10	15
Candidates who were graduates of high or normal schools, academies or seminaries	31	52	50	83

TABLE III.

	4th	3d	2d	1st
Total percentage of graduates	36%	40%	30.6%	20.3%
Total percentage of members of Senior or Junior Classes in colleges of good standing	8.2%	3%	2.1%	7%
Total percentage of members of Sophomore or Freshman Classes in colleges of good standing	17.7%	12%	21.1%	13.3%
	61.9%	55%	53.8%	40.6%

TABLE IV.

Alabama	4	Michigan	1
Arkansas	2	Minnesota	3
California	1	Mississippi	2
Colorado	1	New Hampshire	5
Connecticut	2	New Jersey	48
Delaware	6	New York	16
District of Columbia	1	North Carolina	7
Florida	2	Ohio	18
Georgia	1	Oregon	1
Idaho	1	Pennsylvania	356
Illinois	2	Rhode Island	3
Indiana	7	South Carolina	2
Iowa	6	Texas	9
Kansas	1	Utah	1
Kentucky	4	Vermont	1
Louisiana	1	Virginia	3
Maine	2	Washington	6
Maryland	4	West Virginia	9
Massachusetts	21	Foreign	19

SUMMARY.

New England States	34	Pennsylvania, including Phila-	
Middle States	93	delphia	356
Western States	10	Middle West	23
Southern States	44	Foreign	19

CHARLES H. FRAZIER,
Dean.

APPENDIX VI.

REPORT OF THE DEAN OF THE FACULTY OF DENTISTRY.

To the Provost of the University:

SIR: I have the honor to submit the following report of the condition of the Department of Dentistry for the academic year 1905-06:

The total number of students matriculated, 1905-06....	330
Students of the Third year	122
Students of the Second year.....	91
Students of the First year	98
Special Students	19
	— 330
Number of new matriculates, including those admitted to advanced standing	156

Those admitted to advanced standing presented certificates from the following institutions:

Australian College of Dentistry, Melbourne, Australia.....	1
Birmingham Dental College, Birmingham, England	2
Chicago College of Dental Surgery	1
Dental Department, Medical Faculty Rio de Janeiro	1
Ecole Dentaire de Paris, Paris, France	8
Ecole Odontotechnique, Paris, France	3
Escuela de Dentistica, Santiago, Chile	2
Guys Dental Hospital, London, England	1
Louisville College of Dentistry	1
New York College of Dentistry	21
New York College of Dental and Oral Surgery	1
Northwestern University Dental School	1
Pennsylvania College of Dental Surgery	1
Philadelphia Dental College	2

Royal Dental Hospital, London, England	4
University of Berlin, Germany	1
University of Charkoff, Russia	1
University of Graz, Austria	1
University of Iowa, Dental Department	1
University of Nürnberg, Germany	1
University of Paris, France	3
University of Rome, Italy	2
University of Tennessee, Dental Department	2
Western University of Pennsylvania, Dental Department..	1

The numerical representation of the several States and countries in the Department is as follows:

Middle States	178
New England States	49
Western States	14
Southern States	9
Australia	14
Austria	2
Belgium	1
Brazil	3
British West Indies	2
Canada	5
Chile	3
Cuba	2
England	9
France	15
Germany	3
Holland	1
Hungary	1
Italy	3
Japan	2
New Zealand	7
Nicaragua	1
Porto Rico	1
Roumania	1
Russia	3
Syria	1

SUMMARY.

United States	250
Foreign countries	80

The amount of work performed in the Operative and Mechanical Departments has been as follows :

Number of clinical operations	23,220
Number of mechanical operations, including crown-and- bridge work and technic work	3,640
Number of patients	12,514
Amount of gold used for fillings exclusive of that used in mechanical work, ounces	79
Number of students in the graduating class	122
Number of students who received the degree	112

The total number of students matriculated in the Department of Dentistry is thirty-nine less for the session of 1905-06 than the total number for the preceding session. This is fully accounted for by the fact that the abnormally large entering class for the session of 1903-04 was the last class admitted previous to the inauguration of the four years' curriculum, afterward abandoned, and was the class graduated at the close of the session of 1905. This graduating class numbered 168 and constituted nearly one-half of the total regular enrolment of the Department. The size of the graduating class for that session was therefore quite in excess of the ratio normally existing between the outgoing and incoming classes.

That the Department has made a substantial advance in the growth of its incoming classes is shown by a comparison of the total first-year enrolment for preceding years, as follows :

First year enrolment for session* 1903-04	156
First year enrolment for session 1904-05	90
First year enrolment for session 1905-06	98

It is of interest to note that the increase in enrolment in the first-year class for the session of 1905-06 over that of the previous session occurred notwithstanding the fact

* Last class admitted previous to the inauguration of the four years' curriculum

that the tuition fee for that session and thereafter was increased by 50 per cent in addition to the new charge of \$10.00 authorized by the Trustees for the Houston Club and Gymnasium privileges of the University. It is a gratifying fact that the equity of these increased charges is cheerfully recognized by the student body, and that the improved facilities which they represent have served to stimulate an increase in our enrolment. That this view correctly represents the situation is borne out by the data now at hand, which indicate a decided increase in the prospective enrolment for the ensuing session.

During the year the following resignations in the staff of instructors have been received and accepted:

Dr. William C. Marsh, Demonstrator of Operative Dentistry.

Dr. Ambler Tees, Instructor in Dental Ceramics.

Dr. George O. Jarvis, Assistant Demonstrator of Applied Anatomy.

To fill these vacancies there have been appointed Dr. D. J. Thomas and Dr. Emerson Sausser, as Demonstrators in Operative Dentistry; Dr. W. A. Capon, as Instructor in Dental Ceramics, and Dr. George M. Dorrance, as Demonstrator of Applied Anatomy.

The work of the year in all of the divisions of the course has been highly satisfactory, especially as to the grade of excellence attained. At the close of the session 112 members of the graduating class received the degree of Doctor of Dental Surgery, which is the largest class graduated from any dental educational institution in America for that session.

The Department has received from its Alumni a bronze mural tablet, erected by them in grateful recognition of the services to dental science and art and to this University in dental education, by the late Dr. Charles James Essig, formerly Professor of Mechanical Dentistry and Metallurgy

in this Department. The memorial tablet was unveiled with appropriate ceremonies on April 12, 1906; it was accepted on behalf of the Trustees by the Vice-Provost, Dr. Edgar F. Smith, and was subsequently permanently placed in the main corridor of Dental Hall.

I have also to record the receipt of a donation of \$100 from Dr. W. Leon Ellerbeck, of Salt Lake City, Utah, for the establishment of two prizes, each of \$50.00 value—one for the most meritorious essay by an undergraduate of this Department upon a subject germane to dentistry; the other to be awarded to that member of the first-year class who attains the highest standard of scholarship for the session. The donor of these prizes offers them in the hope that they will stimulate and develop excellence in the lines to which they relate, and expresses the willingness to continue the offer permanently if the effect thereof proves to be that which it is his desire to produce.

I am pleased to note the continued activity among our Alumni generally in furthering in all legitimate ways the interests of the University and its Dental Department. This activity is particularly noticeable among our foreign Alumni in England, France, Germany, Switzerland and Australia. In these countries educational ideals and methods in dentistry differ from those of America in many respects, with the result that false impressions, often leading to unjust criticism of American methods, have arisen abroad. In the adjustment of these differences and in the propaganda of correct ideas with regard to the thoroughness and extent of our educational system our foreign Alumni have done a most important work, and to their influence and unceasing activity is largely due the highly satisfactory status of our Department of Dentistry in foreign countries.

Respectfully submitted,

EDWARD C. KIRK,
Dean.

APPENDIX VII.

REPORT OF THE DEAN OF THE FACULTY OF VETERINARY MEDICINE.

To the Provost of the University:

SIR: I have the honor to submit the following report on the condition and work of the Veterinary Department for the year terminating August 31, 1906:

The attendance of students has been as follows:

Students of the Third-year class	31
Students of the Second-year class	32
Students of the First-year class	42
<hr/>	
Total	105

The last graduating class numbered thirty men. The attendance is now greater than ever before in the history of the School.

It is most gratifying to be able to report that a part of the new building is now under construction, and the builder promises to complete it early in the summer of 1907, so that it will be in use at the beginning of the following session. This will supply some of the long-standing and urgent needs of the School and Hospital.

The new building, as planned, is designed to surround the plot of ground at Thirty-ninth Street and Woodland Avenue, with a frontage of 260 feet on Woodland Avenue and on Delancey Street and with a frontage of 210 feet on the east side and on Thirty-ninth Street. There will be a large courtyard within. In general, the Hospital will occupy the south half of the structure and the School the north half.

The west side is now being built, so that it will include a part of the Hospital and a part of the School. The contract calls for the expenditure of the amount (\$100,000) appropriated from the funds of the State and a considerable sum in addition.

The new construction will provide facilities for the out clinics, for surgical work, some hospital accommodations for large animals, an almost complete hospital equipment for small animals, a pharmacy, a clinical laboratory, offices of administration, class rooms, a class laboratory and laboratories for the use of the State Livestock Sanitary Board.

It is hoped that the construction of the remaining portion of the building can soon be arranged for, so that the inadequate temporary quarters may be vacated and removed.

The precedent of State aid for veterinary education is now well established in foreign countries, in other States of America and in Pennsylvania. The returns from expenditures in this direction have always been most remunerative. The public is in need of protection and assistance that can be furnished only by a well-trained body of veterinarians, and it appears to be both rational and necessary that the public should take part in the training of these men, by providing ways and means.

The need for well-trained veterinarians continues to increase. The passage by Congress of a law to provide for a great extension of the Federal meat inspection system, and an annual appropriation for this purpose of \$3,000,000, have created a demand for a larger number of veterinarians than has been available for this service. There is not a single competent veterinarian in the United States who may not have remunerative employment if he wants it. There is at least one profession that is not overcrowded! This sudden development has placed an increased responsibility on the veterinary schools; it is to be hoped that they may be enabled

to rise to the occasion and do the work that is expected of them.

The need for veterinarians in other lines of work, and especially for research work and for teaching, is increasing more rapidly than the supply. To prepare men for these more important positions is the highest grade of work that a school can do, and it is largely through such work that the helpful influence of a school is extended.

In previous reports reference has been made to the need for a broader training of veterinary students along the lines of animal husbandry. The need for instruction in this field is frequently felt and is often commented upon by practicing veterinarians. To teach such subjects satisfactorily would require the addition of a farm, operated as a stock and dairy farm, to the equipment of the School. Were this equipment provided, it would be useful, not only in the instruction of veterinary students, but it appears to be probable that there would be a large demand for post-graduate instruction. Moreover, such an equipment would enable the School to render additional service to agriculture and to animal husbandry by providing an object lesson and formal instruction in various subjects, as in the production of hygienic market milk—a subject that is of very great sanitary and economic importance.

The State has already provided in Delaware County, and only ten miles from the Veterinary School, a farm upon which certain investigations are being conducted by the State Livestock Sanitary Board. This would be a most convenient location for the purpose in view, and it would appear to be logical, and quite in the line of a proper development, for the State to co-operate in this work, at this place, with the Veterinary School.

All veterinary work is related to animal husbandry and to agriculture, many veterinary students are farmer's sons

and many veterinarians make their homes in the country. Veterinarians constantly come in contact with farmers and dairymen and are called on by them for counsel and assistance. It has come to be a recognized function of the State to furnish assistance to farmers through instruction, experimentation and technical information. It is difficult to devise any plan by means of which, for the same cost, the State could as effectively diffuse useful knowledge in relation to animal husbandry, as through such an equipment as I have outlined, and through the veterinary profession.

The largest loss the School experienced as a result of the fire last year was the museum specimens, all of which were destroyed. A beginning has been made toward the formation of a new collection, and this will be added to as rapidly as possible.

The greatest need of the School at present is the undivided services of a number of teachers. It has always been the practice to pay partial salaries to the members of the teaching staff, as was formerly the custom, to a large extent, in all professional schools, and is still the custom in many medical and allied schools, with relation to certain chairs. But the development of veterinary education makes it necessary that a number of veterinarians shall be employed and paid to devote their time and energies to the development of their courses of instruction and their special branches of knowledge, and not depend for a livelihood, and thus give their chief attention, to practice outside of the School.

Of course such a change cannot be made without increased revenue. The importance of the work of the School is believed to be great enough fully to justify an appeal for additional support to philanthropists and to the Commonwealth.

Respectfully submitted,

LEONARD PEARSON,
Dean.

APPENDIX VIII.

REPORT OF THE LIBRARIAN.

To the Provost of the University:

SIR: I have the honor to present the report of the Library for the year ending August 31, 1906.

It is pleasant to chronicle that the steady increase in the growth of the Library which has marked the past decade, and in the use to which the Library's collections are put, has been continued during the past year. To the main Library 9,323 volumes were added, and to the Biddle Law Library 4,489 volumes, making a total increase of 13,812 volumes—a larger number than has hitherto been reported in any one year, except on two occasions, when large libraries were bought in bulk. It is encouraging to add, as an indication of the interest taken in the Library by friends of the University, that the two sources whence these accessions were obtained—gift and purchase—are about equal.

GIFTS.

The most notable gift to be chronicled for the past year was the presentation to the Biddle Law Library of the library of the late Richard C. McMurtrie, by his daughters, who have thus added another tie connecting the life and career of the distinguished jurist with the University. The library, comprising about 2,500 volumes, includes, among other things, United States Reports, Massachusetts and Pennsylvania Reports, as well as an excellent collection of

English Reports, besides about five hundred text books or legal treatises, for a large part old editions of standard works, and on this account of historical value.

To thus place a scholar's library at the disposal of those training themselves for their professional career, is to insure a continuance of the best traditions of the past; and it represents in a measure the continuance of that scholar's work at the point where he laid down his task in order to hand it on to the succeeding generation.

Another important gift to the Biddle Law Library was made by Mrs. Herbert Washington, who presented 330 volumes, comprising chiefly State Reports.

In the main Library the gifts of smaller and larger collections have flowed in steadily during the entire year—indeed to such an extent that it was found impossible for the regular force to provide for the cataloguing of accessions from this source. Thanks to the Chairman of the Library Committee, additional cataloguers were secured, through whom the accumulations of the past few years are being catalogued. The Chairman has kindly agreed again to provide the necessary sum for the extra cataloguing during the coming year.

In order to enable the various departments represented in the College and Graduate School to purchase, as in former years, important new publications, and to make up the sum required for defraying subscriptions to periodicals, Messrs. C. C. Harrison, J. G. Rosengarten and J. S. Harris contributed each \$1,000.

Through the efforts of Mr. Walter George Smith a special fund for the purchase of works relating to Church History in England and on the Continent was secured from friends of the institution.

A portion of the special fund provided by Mr. William P. Henszey for the Architectural Department was devoted to the purchase of books.

As in former years, the Society of the Alumni of the College contributed \$50, to be used in the purchase of works of a general character.

A special fund of \$500, contributed by Messrs. J. G. Rosengarten and J. Levering Jones, was placed at the disposal of the Library for the purchase of text books needed in the History Department, and the Professors of History report that in consequence of the purchases made out of this fund their work has been considerably facilitated. The Library now possesses a sufficient number of copies of the more important works in historical subjects, required for reference and reading by College students.

A special appropriation of \$500 out of the income of the Wharton School was spent in a similar manner to provide a sufficient number of copies of books needed for reference and for collateral reading in the Wharton School courses.

In addition to the various sums placed at the disposal of the Library during the year by Mr. Rosengarten, he has regularly sent publications, new and old, to us, and in the same way scarcely a week passes without our receiving from Dr. S. Weir Mitchell some volumes that are of decided value in a university library.

The medical publishers of this city, and more particularly Messrs. W. B. Saunders & Co., have sent us new medical publications—gifts that are especially welcome because the endowment fund established by the late Dr. William Pepper is barely sufficient to cover the cost of subscriptions to medical periodicals. The medical students have not been slow to respond to the increased facilities offered by the Pepper Medical Alcove, which is filled at almost all hours during the day and evening with students consulting medical periodicals and the new medical works to be found there. An addition of \$100 each year to the William Pepper Endowment Fund would go far toward enabling us to

secure many of the important medical publications which the publishers find it impossible to present to the Library, but which are essential, more particularly for the work of advanced students.

Special mention should be made of the purchase of a choice collection of works in Arabic and Persian dialects and of Hebrew books printed in the Orient, which were collected with great care by an Oriental traveler. The collection consists of about 250 volumes, representing specimens of a large number of Oriental presses, and contains invaluable material for the study of the Arabic dialects spoken in various parts of the East. A fund provided by Mr. Rosengarten enabled us to secure this collection, which is probably unique in the libraries of this country.

The University also received a copy of the descriptive catalogue of the late Mr. Heber R. Bishop's remarkable collection of Jade. The work consists of two volumes, and is one of the finest specimens of book-making produced in this country. The illustrations in particular are masterpieces of their kind.

The fund for the purchase of early editions of old English plays, obtained through friends of the University a number of years ago, has now been almost entirely spent. Through it a choice collection has been secured, and it is also pleasant to announce as an indication of the use to which this collection has been put, that two monographs based on texts in our collection have already been issued by the University of Pennsylvania press, and a number of additional monographs of the same nature are now being prepared by advanced students in the English Department.

Through a fund generously provided by Mr. Samuel Castner, Jr., we are receiving facsimile reproductions of Vatican manuscripts as they are published. The series when complete will be of great value to students of palæography.

The reproductions are so admirably made as to replace the necessity of consulting the original manuscripts.

Dr. William Pepper has continued his active interest during the past year in securing from time to time for the Library, publications and other material bearing on the history of the University. Among the gifts forwarded by him, special mention should be made of an exceedingly interesting set of early matriculation cards and cards of admission to medical lectures, bearing the signatures of famous professors in the Medical Department of the University.

By a special appropriation of \$5,000 from the income of the Harrison Fellowship Fund, which was in part divided among the departments represented in the Graduate School, and in part set aside for purchases of a general character, the Library has been enabled to fill out a large number of gaps which existed in the files of periodicals and publications of learned societies. It is particularly gratifying to be able to report that we have now a valuable collection of complete sets of periodicals covering all subjects, and, while some large serial publications issued by societies and foreign governments are still incomplete, our equipment for research work in the various subjects represented by the Graduate School has been brought considerably nearer to the required standard. The most serious gaps still remaining are in Zoology, Archæology and European History.

PURCHASES AND ACCESSIONS.

In all \$14,424.26 was spent in the main Library for books, periodicals and binding, distributed as follows: Income from the Agriculture, Krauth, Lippincott, Norris, Pepper, Stillé and Wagner Funds, \$1,491.54; Harrison Fellowship Funds, \$1,236.01; and of the special grant of \$5,000 out of the Harrison Fund, \$2,447.37 was spent up to

September 1, 1906; out of the fund from the sale of duplicates, \$207.79; subscriptions to periodicals, \$2,890.76; and from miscellaneous funds for the purchase of books, \$4,098.03; making a total of \$12,371.50 spent for books and periodicals. Adding to this total \$2,052.76 for binding during the year, makes the total of \$14,424.26 mentioned above.

In the Biddle Law Library the sum of \$5,473.04 was expended for the purchase of books and periodicals (including a payment of \$688.27 from the Law Alumni Fund), and \$379.75 for binding, making a total of \$5,852.79, and a grand total of \$20,277.05.

The actual number of books accessioned during the year was 9,323 in the main Library and 4,489 in the Biddle Law Library. The total number of volumes in the main Library is therefore at present 225,356 and in the Biddle Law Library 37,800, making a total of 263,156.

PERIODICALS AND EXCHANGES.

The number of periodicals received at present in the main Library is 1,412, and in the Biddle Law Library 73, making a total of 1,485. Of these 748 are obtained by subscription, 214 through the Exchange Bureau and 523 are gifts. During the year a considerable number of institutions have been added to our exchange list.

We received a total of 7,236 volumes through the Exchange Bureau, as against 6,775 for the previous year. Of these 2,734 were dissertations and other publications of foreign universities, 1,330 dissertations and other publications of American universities; 308 volumes were received from foreign academies and societies and 341 from learned societies in this country; 1,540 volumes from the United States Government and from foreign governments, and the balance from miscellaneous sources.

The Library, besides being a depository of the United States Government, receives regularly the reports of a large number of municipalities in this country and abroad, as well as of railroad companies. We are laying special stress upon collecting publications of this character, so as to provide a good working library for students engaged in the investigation of municipal and railway problems.

Further details regarding the activities of the Exchange Bureau will be found in the report of the Publication Committee, which acts in close co-operation with the Exchange Bureau.

CATALOGUING AND BINDING.

The total number of volumes catalogued during the past year was 9,696. Of this number 7,844 were catalogued by our regular force and 1,852 by the extra cataloguers provided for by a special fund; 2,121 pamphlets and 2,015 dissertations were also catalogued.

In the course of the year 4,886 volumes were sent to the binder, of which number 711 represent volumes sent to be repaired.

CIRCULATION.

The 2,191 readers registered in the Library were distributed as follows:

Officers of University, Professors and Instructors...	221
Students, College	970
Medical Department	271
Law Department	162
Dental Department	103
Veterinary Department	12
Department of Philosophy	196
Fellows	20
Teachers' Courses	76
	— 1810

Special readers (including 57 students belonging to other institutions)	84
Readers paying \$3.00 a year	23
Employees of the University	53
	<hr/>
	160
Total	<hr/>
	2191

In all 76,377 books were circulated, as against 62,651 for the preceding year, representing an increase of about twenty per cent. The detailed statistics are as follows:

	Home use.	Library use.	Total.
Aug. 28 to Sept. 23, 1905.....	639	381	1,020
Sept. 23 to Oct. 28.....	2,518	4,297	6,815
Oct. 30 to Nov. 25.....	2,562	5,891	8,453
Nov. 27 to Dec. 23.....	2,360	5,421	7,781
Dec. 25, 1905, to Jan. 27, 1906..	2,982	6,996	9,978
Jan. 29 to Feb. 24.....	2,689	6,589	9,278
Feb. 26 to March 24.....	2,939	6,256	9,195
March 26 to April 21.....	2,529	4,314	6,843
April 23 to May 26.....	2,909	7,190	10,099
May 28 to June 23.....	1,496	1,744	3,240
June 25 to July 28.....	1,347	646	1,993
July 30 to Aug. 25.....	967	705	1,672
	<hr/>	<hr/>	<hr/>
Totals	25,937	50,430	76,367

The evening circulation, included in the above figures, was as follows:

Oct. 2 to Oct. 28, 1905.....	436	582	1,018
Oct. 30 to Nov. 25.....	533	1,144	1,677
Nov. 27 to Dec. 23.....	509	1,023	1,532
Dec. 25 to Jan. 27, 1906.....	651	1,131	1,782
Jan. 29, to Feb. 24.....	505	1,153	1,658
Feb. 26 to March 24.....	627	1,125	1,752
March 26 to April 21.....	508	715	1,223
April 23 to May 26.....	776	1,343	2,119
May 28 to June 14.....	272	245	517
	<hr/>	<hr/>	<hr/>
Totals	4,817	8,461	13,278

During the year 45,464 students were registered as using the inner reading room. Of this number 34,336 represent the attendance during the day and 11,128 during the evening hours. The average attendance of students at the Library during the evening hours was considerably greater during the past year than before, and there is every reason to expect that the number will be still further increased in the coming year.

It is impossible to obtain accurate figures regarding the use of the seminar libraries in the upper floors of the Library Building, but it is safe to say that in all between four and five hundred readers make use of the main Library daily.

During the six weeks' session of the Summer School 1,422 readers were registered as using the Library.

As in former years, we were obliged to borrow a considerable number of books from other institutions, and I beg particularly to tender thanks to the Philadelphia Library Company, to the Library of Congress, and to Columbia and Harvard Universities. In return we have loaned books to eighteen different institutions during the past year.

SEMINAR AND DEPARTMENTAL LIBRARIES.

During the past year 845 volumes have been added to the departmental libraries and 1,064 were returned to the main Library, leaving a total now deposited outside of the Library Building of 16,033. In the seminar libraries in the upper floors of the Library Building, 966 volumes were added and 433 returned to the stack, making a total of 13,173 volumes at present placed at the disposal of graduate students in special rooms in the Library.

On July 1st Miss Susan W. Randall tendered her resignation as Assistant Librarian after a faithful service of over five years. The Trustees' Library Committee, at its meeting on April 27th, recorded an expression of appreciation of Miss Randall's services. It was under her super-

vision that the laborious work of recataloguing the Library according to improved methods of library economy was carried out, and in her capacity as Assistant Librarian she was of great aid in bringing the administration of the Library up to the required standards.

In her place Miss Katharine S. Leiper, who has been connected with the Library since 1900, was elected, and her work in the past, as well as her thorough knowledge of library administration in all its branches, furnish the assurance that she will satisfactorily carry out the important tasks assigned to her.

I trust that I may be permitted to take this opportunity of recording, also, the faithful and efficient services rendered to the Library by two other officials who have been with us for a considerable number of years—Miss Ann C. Carson and Miss Edith N. Gawthrop, the former acting as superintendent of the building in addition to her labors in the cataloguing and binding departments, while to the latter is largely due the efficiency of the service rendered by the circulation department.

I feel that I cannot close this report without again expressing, as in former years, the hope that an adequate endowment fund for the Library may be provided in order to enable us to cope with the growing needs of a great institution. It has been the constant aim of the present Library administration to make the University Library not merely an indispensable adjunct to all departments of the University, but a research library of the largest scope, accessible to scholars not directly connected with the institution. We have a growing number of readers, not connected with the institution, to whom the privileges of the Library are extended—among them distinguished scholars who, without the University Library, could not successfully carry on their researches.

The character of the books needed by a university library makes it a natural center for a goodly part of the scientific investigation carried on in a large city. With an endowment fund of \$500,000 the University Library can be made one of the great centers of research work in this country, and it will be admitted that not only for the sake of the University, but also for the city and State, it is desirable to provide in this city such a center, where students in all branches may expect to find in abundance the material without which scientific investigation is seriously hampered, and, indeed, impossible.

The University in April last joined other institutions of this city in celebrating the two hundredth anniversary of the birth of Benjamin Franklin, who more than any other single individual contributed in his days to the promotion of knowledge and to the encouragement of research. Would it not be a worthy tribute to the memory of the distinguished founder of the institution to establish in connection with the Library a Franklin Research Fund? In no better way could we insure the continuance of the work to which he devoted so large a portion of his life.

I have the honor to be, sir,

Obediently yours,

MORRIS JASTROW, JR.,
Librarian.

APPENDIX IX.

REPORT OF THE DIRECTOR OF THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY.

To the Provost of the University:

SIR: In reporting the condition and work of the Wistar Institute for the year ending August 31, 1906, I am compelled to begin with our misfortune.

On September 18, 1905, death took from us our friend and patron, General Isaac J. Wistar, to whose generosity anatomical science is indebted for a most beneficent founda-

**General
Isaac J.
Wistar**

tion. Those who knew General Wistar recognized in him a man of great force and courage, one whose practical knowledge of all conditions of man commanded the greatest respect and to know whom was to love. With all his forceful qualities, there was beneath them a most sympathetic, generous and kind heart, ever ready to listen to the difficulties and troubles of his fellow-beings and to render good advice. It was my good fortune as an officer of the Institute to have been associated with General Wistar since its incorporation, in 1893, and to have assisted in many matters relating to the equipment of the Institute and especially with transactions relating to its financial well-being. During all this time it was General Wistar's ambition to make the Wistar Institute as useful as possible to the science of anatomy and to mankind in general, and it is to his exacting business methods and far-seeing policy that we owe a stable and ever-increasing endowment to perpetuate

its activities. Of his entire fortune General Wistar gave about two-thirds to the Institute before his death and, with the exception of a few small bequests, willed the balance also to the Institute.

At the meeting of the Board of Managers of the Wistar Institute the following Minute was recorded :

"The Managers of the Wistar Institute of Anatomy and Biology desire to express their sorrow at the death of General Isaac J. Wistar, the founder and liberal sustainer of the Institute. As his trusted counsellors and colleagues, continually associated with him since the founding of the Institute, we shall ever regret the death of one who in all our mutual relations was so constantly high-minded, kindly and courteous.

"His life illustrated the power of a man of persistent energy to do in turn, and with admirable competence, whatever duty fell to him in a life of varied activities. A youth of adventure, and then a brief period at the bar, found him eager to serve his country when at the outbreak of the Rebellion he became Lieutenant Colonel of the California Regiment.

"A career of great gallantry and eminence in the army brought him rapid promotion and gave him back, at the close of the war, to peaceful pursuits. Since then in this his birthplace, General Wistar has distinguished himself in the service of the state penal institutions, and in long and able management of the canal system of the Pennsylvania Railroad Company.

"We, the Managers, feel that the foundation and permanent endowment of the Institute constitute such a gift to science as must ever continue to be the best material monument to Isaac J. Wistar. As the farsighted creator of scientific opportunities in the institution he left in our charge, his generous interest and constant oversight will be greatly missed.

"There remains for those who best knew General Wistar the remembrance of a man loyal to all forms of dutiful service, and governed through life by the highest standards of truth and honor. A certain stamp of decision and energy, with other as positive characteristics, set him apart from the ordinary types of ability in the conduct of affairs. But, besides the qualities which made for competence in war and peace, he possessed social characteristics which will be missed wherever men were accustomed to meet him, and nowhere more than by members of this Board, who held to his trust the position of guardians and to him the relation of friends."

During the year the work of the Wistar Institute has been prosecuted according to a definite plan formulated early in 1905. This plan contemplated the organization of an Advisory Board of Anatomists and a local staff of investigators, together with some changes in the methods in vogue of accumulating museum specimens. The organization of the Advisory Board, its personnel and its recommendations, were stated in full in my last report. At the annual meeting of the Board of Managers, held in February, 1906, the same members were re-elected to the Advisory Board.

At this meeting, also, Dr. George L. Streeter, of Johns Hopkins University, and Dr. S. Hatai, of the University of Chicago, were elected as Associates in Neurology. Their terms of service, however, do not begin until September and October, respectively. Dr. Streeter's work will consist of researches in the development of the nervous system, while Dr. Hatai will be concerned with biometrical studies and researches in the chemistry of nerve tissues.

**New
Members of
the Staff**

These additions to the Scientific Staff bring the total number of workers up to six, only four, however, have been at work at the Institute during the year.

In addition to the regular research staff a number of investigators have availed themselves of the privileges of the museum and carried on researches of their own.

The second meeting of the Advisory Board of Anatomists was held on April 17, 1906. Every member was

Annual	present. This meeting was good evidence
Meeting of	that we have gained the sympathy and co-
Advisory	operation of the leading American anat-
Board	mists, and that the members of the Advisory Board feel an interest and responsibility for the work which the Institute is attempting to

do for Anatomy. Each member of this Board is actively engaged in researches in anatomy, and it is very natural that each should take active interest in the organization of anatomy in America and in suggesting those lines of work in which the Wistar Institute will be most efficient in advancing the science. At their meeting in April the year's work was reviewed and the following suggestions were made:

(1) That the Institute initiate a study of racial anatomy of the brain and co-operate with foreign institutes to secure brains of other races; (2) that the Neurological Committee be requested to consider means for the further organization of neurological workers in this country; (3) that it be recommended to develop a staff of expert laboratory assistants such as draughtsmen, modelers and technicians, to facilitate the mechanical work of research; (4) that investigators be admitted from time to time by the Director to the full advantages of the laboratories as guests for such periods as may be determined upon; (5) that whenever opportunity offers of obtaining specially desirable material for the study

of Comparative Anatomy and Embryology this should be secured and preserved for future use.

These recommendations are being carried out as opportunity offers. A number of things depend for their successful execution upon the financial resources of the Institute and must, therefore, be developed as the income will permit.

In September Bulletin No. 1, together with a circular letter from the Committee on Relations of the Wistar Institute to American anatomists, was issued. The bulletin reviewed briefly the history of the Institute and stated its aims and objects, with special emphasis on the Central Anatomical Institute idea, while the circular letter called attention of American anatomists to the possibilities of advancing anatomical science by proper utilization of this beneficent foundation and asked for co-operation of the anatomists. As a result of this action, relations have been established with numerous institutions and individuals for mutual benefit. Valuable specimens have been received; some have been furnished to investigators and others stored for future researches.

As a result of our efforts we received in February from the Central Commission for Brain Investigation, through the Imperial Academy of Sciences of Vienna, a formal recognition of the Wistar Institute as an International Central Institute for Brain Research in America. Hereafter in America all work in co-operation with the Central Brain Commission may be communicated through the Wistar Institute. In May a meeting of this commission was held in Vienna; Professor Donaldson, as a member of the commission, and the Director of the Institute, by special invitation, attended the meeting. The activities of this commission, soon to be published by Pro-

**The Wistar
Institute as
International
Central
Institute
for
Brain
Research**

fessor Waldeyer, of Berlin, will be of interest to neurologists. Before and after this meeting the following laboratories were visited: Naples Zoological Station, Dr. Anton Dohrn, Director; the Polyclinico at Rome, Dr. Mingazzini, Neurologist; University of Pavia, Pathological Institute, Professor Golgi, Director; Anatomical Institute of Professor Obersteiner in Vienna; Physiological Laboratory of Professor Munk in Berlin; the Neurobiologische Institut of Dr. Vogt in Berlin; the Senckenberg Institute in Frankfurt, Professor Edinger, Neurologist; the Psychiatrische und Nerven-klinik of Professor Flechsig, in Leipzig, and the Anatomical Laboratory of Professor Van Gehuchten at Louvain.

The object of these visits was to gather information which would enable us to bring our laboratories up to date in every particular, and bring us into closer relations with the anatomical institutes abroad. Eight weeks were spent in the work, and the results of our observations have enabled us to push forward with greater certainty and confidence.

In order to increase the collections in the museum the plan of making the museum and the laboratory interdependent has been adopted. Materials collected for researches in the laboratory find their way eventually into the museum, where they are stored as a record of observations made and as material for future researches. The purchase of specimens for exhibition purposes only has been discontinued, and hereafter material registered in the museum catalogue must have definite scientific interest.

Having taken Neurology as our major work, naturally our museum growth has been greatest in this branch of the science. There have been registered in the museum catalogue 204 specimens. Most of this number deserve special

mention on account of their value to the real work of the Institute.

Sixty-three negro brains were received from Professor Franklin P. Mall, of Johns Hopkins University. They represent a series which has been carefully studied for certain race characters (*American Journal of Anatomy*, Vol. V, No. 4), and are now held for future investigations on the brains of this race.

Eight human brains of especial interest have been received during the year; their identity must for obvious reasons be withheld. In this connection it may be said that many men of prominence, realizing the value of high type brains for study and comparison, have made provision by will or otherwise whereby, in course of time, the collection of high type brains will be steadily increased.

Four series of pig embryos, all sectioned and mounted, comprising ninety-three slides, and twenty-three series of shad embryos, have been added to our embryological collection.

Two series of osteological specimens, representing in the minutest detail the anatomy of the ethmoid and maxillo-turbinal bones, have been completed and placed in exhibition cases. These complete the series on the osteology of the human skull. From the standpoint of an educational exhibit of its kind it stands unique, and is much appreciated by students of human osteology.

Three india ink drawings, explanatory of the normal anatomy of the human head and arm, have been made and mounted with the specimens to which they relate.

Six reconstructions (Born's method) and two original models, representing researches in the development of the heart and blood-vessels of bony fishes, have been added to the museum. A paper relating to this work will soon be published.

The usual routine of caring for and cataloguing specimens in the museum has been performed. A large number of brain jars have been fitted with air-tight lids and especially devised clamps for quick and efficient means of opening and closing these jars.

We are especially indebted to Dr. Oscar H. Allis, Dr. E. O. Darlington, Dr. J. C. DaCosta, Dr. H. H. Donaldson, Mr. George L. Harrison, Jr., and Dr. F. P. Mall for specimens which have been presented during the year.

Five loans, comprising forty specimens, have been made during the year, three for research work and two for lecture purposes.

The equipment of our laboratories has occupied the attention of the Director for a large portion of the time.

Necessary devices, paraffine ovens, incubators, photographic and projecting lenses, and
The dissecting instruments, which can be purchased in the market, have been supplied.
Laboratories

Besides these, new apparatus has been constructed in the shop, after designs of our own. Laboratories have been fitted with proper tables and soapstone dissecting trays introduced, each supplied with running water and gas, and so placed that the tray is well lighted. In this connection I am led to suggest that in anatomical laboratories, in addition to ample daylight, water, gas, electricity and drainage should be available at any point in every room to be used for anatomical research. A work table supplied with these conveniences and placed directly in front of the best window in the room will be the principal working place of the anatomist. Fortunately, in our building very little of such apparatus was introduced, and we are able by a little adjustment to secure ideal arrangements.

The Library has been, as usual, active. The books and

periodicals are in constant use by members of the staff and a few others. This year 35 new volumes were added, making a total to date of 1,476 bound volumes. We have received 41 periodicals and 14 books issued in parts; of the whole number (55) 46 were purchased, 3 were exchanges and 6 were gifts from societies. The reprints have all been carefully catalogued under both author and subject.

**The
Library**

Our most important accession is perhaps a complete set of the bibliography cards relating to Microscopy, Physiology and Anatomy, issued by the Concilium Bibliographicum. They are divided as follows: Microscopy, 3,170 cards; Physiology, 16,098 cards, and Anatomy, 27,486 cards: making a total of 46,754 cards correctly filed and accessible. These cards represent bibliographical data in the three subjects named, from 1896 to date, excepting in Physiology, in which branch the publication was discontinued from 1899 to 1904, but was resumed in 1905.

This set of cards of the Concilium Bibliographicum is, I believe, the only set in Philadelphia, and is, of course, open to any one who may desire to use it.

The Neurological Library belonging to Professor H. H. Donaldson has been placed in the Institute for the use of investigators in the laboratories. The library consists of 1,000 bound volumes and 4,000 reprints, and is a most valuable acquisition to our working equipment.

In this connection I must also mention the very valuable general library, consisting of some 4,000 volumes, willed to the Institute by General Wistar, and which was placed in dust-proof cases in a specially prepared room at the Institute. With this library came also from General Wistar's home many interesting documents relating to the early history of Pennsylvania and Philadelphia, and to the War of the Rebellion; also, General Wistar's private letters

and correspondence, some interesting pieces of antique furniture, portraits of the Wistar family, including a portrait and a bronze bust of General Wistar, together with a large collection of rugs, clocks, library furniture, and relics of various kinds relating to the Wistar family. Some of this material was specified in General Wistar's will as property to come to the Institute, while most of it was selected by the Director in accordance with the will and the more minute directions received from General Wistar during the last year of his life.

The Wistar Library, the portraits, relics and other articles belonging to this accession have been arranged in a special room selected and prepared by General Wistar himself for the purpose. This room, usually spoken of as the Wistar Memorial Room, is open for board meetings, committee meetings and similar purposes.

It is with pardonable pride that I record the result of our efforts to establish research in our laboratories and make our museum subservient thereto.

Investigations for the present are directed to Neurology, and the chief resources of the Institute are being expended to develop this department; there
Research is no desire, however, or effort made to limit researches to this field should any investigator desire to pursue, in our laboratories, investigations in any other field.

In Neurology, under the direction of Professor Donaldson, the following researches are in progress:

On the Second Nerve of the Frog According to Sex.
By M. A. Bliss.

The Comparison of the White Rat with Man in Respect to the Growth of the Entire Body (in press). By H. H. Donaldson.

In Respect to the Growth of the Brain and Spinal Cord. By H. H. Donaldson.

On the Change in the Percentage of Water in the Nervous System with Advancing Age. By H. H. Donaldson.

On the Period When the Largest Nerve Cells Attain Their Full Size. By H. H. Donaldson.

A Comparison of the Nervous System of *Rana temporaria* and *Rana esculenta* with that of *Rana virescens*. By H. H. Donaldson.

The Effect of Castration on the Growth of the White Rat. By H. H. Donaldson.

A Study of the Internodes in the Fibers of the Peripheral Nerves During Growth. By H. H. Donaldson.

On the Distribution of the Afferent Nerves to the Leg of the Frog. By E. H. Dunn.

The Numerical Relations in a Regenerating Peripheral Nerve. By M. J. Greenman.

On the Zoological Relationship of the White Rat (in press). By S. Hatai.

The Effect on Growth of Partial Starvation Followed by a Return to the Normal Diet. By S. Hatai.

Chemical Changes in the Brain and Cord During Growth. By S. Hatai.

Biometrical Studies on the Skulls of White Rats. By S. Hatai.

On the Epithelium of the Choroid Plexus During Rest and Activity. By M. J. Meek.

Cytological Changes in the Ganglion-cells After Section of the Second Nerve. By W. Ranson.

Transplantation of the Spinal Ganglion to the Brain. By W. Ranson.

On the Daily Activity of the White Rat. By J. R. Slonaker.

The Growth of the White Rat Before Birth. By J. M. Stotsenburg.

Development of the Inter Fore-brain Commissures in the Human Embryo. By G. L. Streeter.

On the Growth of the Peripheral Nerves, a Study of the Internodes. By K. Takahashi.

Of these researches fourteen are being prosecuted in the laboratories of the Institute, seven in laboratories elsewhere. In Comparative Anatomy and Embryology, under the general direction of the Institute, we record two pieces of work:

The Development of the Heart and Vessels in Bony Fishes. By H. D. Senior.

The Conus Arteriosus of *Tarpon atlanticus* (in press). By H. D. Senior.

In addition to the researches for which the Institute is directly responsible there have been a number of investigations pursued at the Institute by men not of our own staff. These researches have been principally upon specimens conserved in the museum. They include work by Dr. James K. Young, of Philadelphia, on Deformities of the Hip-Joint; Dr. Wilson E. Driver, of Norfolk, Va., on Deformities of the Temporal Bone, and Dr. Byron Robinson, of Chicago, on Malformation of the Kidneys.

A co-operative arrangement with the New Jersey Training School for Feeble-minded Girls and Boys, Mr. E. R. Johnstone, Superintendent, has been made, by which the Psychologist of the school will carry on a portion of his laboratory work at the Institute.

During the summer Dr. H. D. Senior, of the Institute Staff, spent six weeks at the Marine Laboratory of the Bureau of Fisheries at Woods Hole, Mass. The object of the work there was to determine the types of vitelline circulation in local Teleostean embryos, as part of an endeavor to classify the different types of Teleostean vitelline circulation in general. In addition to this work, Dr. Senior

collected a number of series of fish embryos, together with specimens of the *Nervus terminalis* (Locy) in the local Elasmobranchs, for the work at the Institute. I desire here to express our gratitude to the Department of Fisheries for the assistance which it rendered us in the work at Woods Hole and to Mr. C. H. Townsend, of the New York Aquarium, for the specimens of tarpon which he sent us.

Several applications for appointments upon our Staff have been received from properly qualified men desiring to pursue extensive Neurological researches. And in this connection I must mention a considerable correspondence from anatomists in all parts of the country suggesting numerous ways in which the Institute may be helpful to research.

The suggestions have been very useful in defining the lines along which the Institute's activities may be most efficient in promoting the science of Anatomy.

In a number of cases we have been able to render assistance, and we hope the future will find us much better prepared to furnish investigators with material and with equipment which may not be found elsewhere.

Living material is an essential to research work in Neurology and Embryology, in order that fresh tissues may be had at any stage. To supply this demand we have established a colony of white rats which are bred to a standard of weight and size. This colony comprises several hundred rats. In addition to this we have also established a colony of opossums (*Didelphys virginiana*), the only representative of its family in America, and presenting an extremely interesting anatomy from the neurological and embryological standpoint. These two forms will furnish abundant material of its kind for laboratory use.

**The White
Rat and
Opossum
Colonies**

Realizing the advantages to be derived from such an

association, the Institute sent a representative to attend the organization and take an active part in the first meeting of the American Association of Museums, held in New York on May 15 and 16, 1906. A paper entitled "Metallic Cases in Museums," by M. J. Greenman, was read by Miss C. N. Perine, who represented the Institute. I would recommend that the Institute become an active member of this Association. Its transactions will be published from time to time, and, like the corresponding English Association, I feel sure will be helpful in the administrative work of the museum.

In the shop during the year we have constructed six standard museum cases, which are 75 per cent finished, work on them having been interrupted to build and erect apparatus in the laboratories.

Repairs to the steam heating plant and the electric lighting plant, and alterations and additions to the plumbing of the building, have been done by the two machinists here employed. I may say here that care has been exercised to anticipate the future and make no changes or alterations in the building which may be at all temporary. A number of pieces of apparatus, among which may be mentioned a combined projection, photographic and drawing apparatus, and a large microtome for cutting brain sections, have been under way for some time. Work on these pieces of apparatus has been interrupted from time to time in order to construct tables and other equipment more urgently needed in the laboratories.

The museum building has been kept in good repair, although there are a number of improvements which might be called repairs and which I should like to have made when finances will permit. And this leads me to state that a long list of "wants" is accumulating, awaiting the time when, with an

increased income, we may hope to have greater facilities, more workers and especially to develop our corps of technicians, draughtsmen, modelers and other aids to scientific investigation.

The Chicago properties, comprising sixty-one flats and sixteen stores, held in the name of the Institute, have been kept in good repair and well tenanted throughout the year. The loss from vacancies last year amounted to only one-half of one per centum on the total collections. This property is visited regularly by the Director, through whose office all details of management are conducted.

**Chicago
Real
Estate**

In conclusion I beg leave to remind you, Mr. Provost, that this is the first year in the history of its existence when the chief aim of the Institute has been research and when the museum and all departments of the Institute have been made subservient to this aim.

The Board of Managers has very wisely determined that the Institute's activities in the future shall be concerned with the development of new and original knowledge, as set forth in the Deeds of Trust. And with the belief that it will show progress in the right direction, I respectfully submit the foregoing report.

MILTON J. GREENMAN,
Director.

APPENDIX X.

DEPARTMENT OF ARCHÆOLOGY.

To the Provost of the University of Pennsylvania:

SIR: The Department of Archæology has, during the year just closing, continued its work in the Free Museum of Science and Art. No work under the direction of the Department has been done in the field since the last report. The number of visitors to the Museum during the year ending August 31 was 40,585, being 1,901 more than the previous year.

During the winter it was found necessary to relay the floor in the basement of Pepper Hall. This was done at an expense of \$153. The lecture room, Widener **Building** Hall, was painted during the summer by our own employees. Four new cases have been added on the west side of the first floor, for the American and General Ethnological Sections.

When the Museum was built it was planned that the necessary heat and light should be supplied from the power plant of another institution. During construction it was found that, at least temporarily, this Museum must have its own plant. The boiler then erected gave our engineer much concern for several years past, and last spring was found inadequate to carry us through another winter. Other conditions remaining unchanged, the necessary contracts, for the erection of a suitable permanent boiler house and pair of boilers, were entered into during the summer.

With the usual co-operation of the Pennsylvania Branch of the Archæological Institute of America, the lecture course was continued during the winter, the lectures, in most instances, being given on the afternoon of Saturday instead of Wednesday, as in previous years. This change was made by the Board of Managers at the request of many who were unable to attend lectures on other afternoons.

Lectures

In its last annual report the Board of the Department suggested to the University, and to learned societies, that the Museum is a desirable place for holding meetings and receptions. It is with pleasure we report that the Museum was used for purposes other than those of the Department, during the year, as follows:

**Other Uses
of Building**

Annual meeting of Pennsylvania Branch, Archæological Institute of America.

Faculty teas—one in the autumn, a second February 22.

Reception by Provost and Mrs. Harrison to the first-men of the University.

German lecture by Dr. Reithmüller, under the auspices of the University.

Afternoons in Science Club of Chester, through Mrs. Woodbridge, with addresses by Dr. Clay and Dr. Kent.

Reception by the Civic Club on the evening of April 8.

Reception by Teachers' Association of Philadelphia to teachers in West Philadelphia schools.

Luncheon to the delegates to the Convention of Charity Organizations.

Lecture to Library Club.

Reception by teachers in Philadelphia schools to Dr. Brooks, the retiring Superintendent of Education of the City of Philadelphia.

The Board wishes to call particular attention to the

reception given by the Civic Club. Although the evening of April 8 was wet and disagreeable, more than 1,100 persons availed themselves of the opportunity of visiting the Museum. The Civic Club Committee received the visitors, who were then shown through the Museum in a very interesting way by Dr. Clay, a number of students in the University and others.

Our collections were so much appreciated on this occasion that we hope there may be many more such opportunities given to the public.

An innovation in the work of the Department was a series of teas given by the Board each week from January 1 to April 1. On at least two afternoons there **Department** were perhaps two hundred guests present. **Teas** While the attendance was not always large, each tea brought some persons who had never before visited the Museum.

The extension of the influence of the Museum is most important for the welfare of the Department, and we hope the agencies already at work, together with the personal efforts of the members, will increase the membership of the Department to at least 2,000.

As noted in the last report, Dr. William N. Bates, Curator of the Mediterranean Section of our Museum, and Professor of Greek in the University of Pennsylvania, was absent during the year, acting **Work of** as Director of the American School of Classical **Curators** Studies in Athens. In Athens he procured for us a copy (one of but five made) of the bust of one of the Archæic Maidens, affectionately called "Die Tante" by the German students, found buried on the Acropolis, the product of a period antedating the Parthenon, 500 B. C. This copy was purchased by part of a balance remaining in the Dillwyn Parrish Fund.

Dr. Hilprecht again visited Constantinople in the service of the Imperial Ottoman Museum, assisting and directing the installation of the invaluable collections in that museum. He was also able, while there, to make a further study of the tablets sent to that museum from our finds at Nippur.

Dr. Gordon, having been appointed a delegate by the Anthropological Association of America, attended the International Congress of Prehistoric Archæology at Monaco in April. In September he represented this Museum at the International Congress of Americanists at Quebec.

A Drexel medal was awarded, on the vote of the medalists, as provided by the deed of gift, to Dr. W.

M. Ramsay, of King's College, Aberdeen, for **Drexel**
explorations in Asia Minor, and publications **Medal**
thereon.

It is gratifying to your Board to be able to state that a beginning has been made on the publication of the much-needed catalogue, the Curator being enabled, through the liberality of Mrs. Lucy Wharton **Catalogue**
Drexel, to publish a catalogue of the collection of fans bearing her name.

We hope that in a short time similar catalogues, to be sold, as is this one, for a very small sum, may be provided for each section of the Museum.

During the spring Dr. Brumbaugh and Dr. Talcott Williams conducted the third prize essay contest, and the second drawing contest, the awards being made June 4. The interest shown by the **Prize Essay**
contestants, the committees who rank the **Contest**
essays and the drawings, and the donors of prizes, show that we are working on popular lines in thus bringing the Museum and the city schools into touch with each other. And we wish to again thank all who have made this contest successful.

Dr. Penniman, Dean of the College, took with him, on the extensive trip he made last spring, several cuneiform tablets from Nippur, illustrating the work of the Department, and arousing interest therein.

This report would be entirely incomplete if it did not recall the very great loss the Department sustained in the death of Mr. Clarence H. Clark. As it is highly proper that the minute adopted by the Board should appear at length in this report, it is quoted herewith at length:

"In recording upon the minutes, with profound grief for the loss of an associate and grief as deep for the going of a friend, the death of Clarence H. Clark, the Board of Managers of the Department of Archæology of the University of Pennsylvania desires to leave this permanent memorial in the archives of the institution it directs, of one of the founders of the Department and of the Free Museum of Science and Art. He was, with his brother, Edward W. Clark, the first to contribute to the Babylonian Exploration Fund of the Museum. He began these contributions before the Museum was in existence. He continued them through all the various and varied fortunes of the explorations, and he crowned them by sharing in the endowment of the University Professorship which insures the lasting study and full use for science of the largest, most valuable and most significant collection in the Museum. He shares with Dr. William Pepper in the first steps for the organization of the Department, the creation of the Museum, and the erection of the building which is the home of both. His own generous devotion of land to public purposes was among the weighty arguments which led the city authorities to cede

to the special use it now discharges the site on which the Museum stands. It was his wise, liberal and prophetic foresight which urged a plan large enough for all the future growth of the institution. He led in contributions to the erection of the edifice for which he had always a special affection. He was as unsparing in his personal efforts to secure private contributions, as he was untiring in his public pleas to the Legislature of the State in its behalf. Upon the long and difficult task of combining beauty in design, convenience in plan, security in construction and economy in design, he lavished the labor and the skill, the ability and the experience which had been sought through many years for a long succession of public movements and financial enterprises. No detail was too insignificant to escape his notice, and no need of a building, equally devoted to the solitary scholar and the thronging public, to scientific research and to public education, was forgotten by him in the long, patient and successful labors which he gave to his onerous duties as Chairman of the Building Committee of the Museum.

"In the general public and private grief felt for him in all the wide range of his activities, as a man loved in every relation known to human life, and a citizen useful in every field where the city and his country could be served by his ability and devotion, this Board, in which he sat so long and to whose work he gave so many years, can do most and best for his memory by recalling to those to whom his departure comes nearest, that through all the future, scholars in this Museum will remember him with gratitude; and that greater public, for whom he provided park and library sites, will receive, in the Museum for which he did so much and whose chief burden he bore so long, a daily lesson in knowledge, in beauty and in the teaching of the past, which

his own personal life and collections show to be dear to him, and which his generous gifts and more generous labors have opened to thronging thousands so long as this city and our University endure."

The Board of Managers suffered further losses by the resignation of Mr. John H. Converse and Mr. E. B. Smith from its membership. The former because of **Resignations** his election to the Board of Education, the **and** latter because of his election on the Board of **Elections** City Trusts. Messrs. Charlton Yarnall, John W. Converse, C. Howard Clark, Jr., and Dr. Martin G. Brumbaugh have been elected to fill vacancies in the Board.

The Museum has been enriched during the past year by a legacy of \$5,000, for work in American Archæology, from the estate of Francis Macauley. **Legacies** Mrs. Lazarus, of New York, has bequeathed to us a like amount for general purposes, and also some pictures. This legacy should be received during the current year.

Before the end of the year another number of the Transactions, being Part I of Volume II, was **Publications** issued. A copy was sent to each member of the Department, and one hundred copies were dedicated and presented to the International Congress of Americanists at Quebec.

Mrs. Hawes (formerly Miss Boyd) is continuing the preparation of her work upon the excavations conducted by her at Gournia.

The publications of the several sections of the Department are noted in detail in the reports of each Curator to the Provost of the University, which are submitted herewith.

The following gifts of objects have been received at the Museum:

From Miss Dora Keen, Etruscan dish.

Rev. Mr. Huston, collection from Australia.

Gifts

Mrs. Walter M. James, bow and seven arrows from Paraguay.

Miss Lundy, bronze and glazed statuettes of Egyptian gods and goddesses; also carvings from the Northwest.

Rev. Charles S. Braddock, clay tablets from Siam.

American Exploration Society, large stele from Tell el Retabeh, identified by Petrie as the town of Ramses, the Pharaoh of Exodus—stele formed part of left wall of Temple—also Hyksos pottery.

From Egypt Exploration Fund, fragments of painted limestone from the XIth dyn. Temple at Deir el Bahari.

In the last report announcement was made that copies of the publications of the Department were placed on sale in a show case at the entrance to the Museum. Quite a large number of photographs of the Museum and its collections have now also been placed on sale at the entrance.

It is with regret that the Board is compelled to call attention to the condition of the treasury now prevailing. The fiscal year closes August 31. We closed the year free of debt, but since that date the bills for boiler-house and boilers, etc., have come due, and besides there has not been a sufficient income to meet current needs. We have usually received annually donations amounting to say \$10,000. This year it will be necessary to secure at least \$18,000 to close the year without deficit.

If each member of the Department will endeavor to increase the number of contributors, we will soon have on our rolls a sufficient number of members to provide the treasury with the from \$10,000 to \$15,000 it has heretofore been necessary to raise by personal solicitation.

Between the end of the year—August 31—and the date of the writing of this report, one of our vice-presidents, Mr. Eckley B. Coxe, Jr., has added to his already generous gifts to the Department an agreement to present to the Department, for the use of the Egyptian Section, the sum of \$8,000 a year, for five years, for the salary of a Curator of this section, for work in the field, and for publications. In accordance with this gift, Dr. David Randall MacIver, of Queen's College, Oxford, has been engaged as Curator of the Egyptian Section, and is spending the winter at work in Egypt.

Respectfully submitted,

S. F. HOUSTON,
President.

REPORT OF THE CURATOR OF THE MEDITERRANEAN
SECTION.

TO S. F. HOUSTON, ESQ.,
President, Department of Archæology.

SIR: During the academic year 1905-1906 the Curator of the Mediterranean Section was absent in Greece as Director of the American School of Classical Studies at Athens. He can, however, make the following report: The acquisitions of this section during the past year have not been numerous. Mr. S. F. Houston presented seven vases from Southern Italy. These belong to a class which was previously scarcely represented in the Museum, and they, therefore, help to make the collection more representative.

The Museum at Candia, in Crete, has sent us a large box of early Cretan vases, chiefly from Gournia. These

vases are still in transit, but will be a welcome addition to the other acquisitions from this site.

The Mediterranean Section has also acquired an interesting reproduction of one of the female figures in the Acropolis Museum at Athens. These statues are of the greatest importance for the study of early Greek art, but because of their color the Athenian authorities have never permitted casts of them to be made. The reproduction purchased by the Museum was made by a Danish sculptor, who also made copies for the Museum at Copenhagen, the South Kensington Museum, the Athens Museum and for Professor Lechat at Lyons. It is very much to be desired that similar copies of other of these statues be obtained. As it is, no other museum in this country now has a reproduction of any of them.

There are no other acquisitions to report, but in this connection it may be announced that the American Exploration Society has recently made an arrangement with Mr. Richard B. Seager by which such finds made by him in Eastern Crete as are permitted by the Cretan authorities to leave the country will come to this Museum.

The Curator is planning to rearrange the vases chronologically, separating the Greek specimens from the Etruscan and Italian. It is, perhaps, not generally known that the collection of vases is one of the most valuable possessions of the Museum. It is especially rich in Attic vases of the fifth century B. C. The collection in the Metropolitan Museum in New York is larger, but it does not have so many fine specimens. In fact, the only collection in the country which surpasses ours is that of the Boston Museum of Fine Arts. As the vases, therefore, form the most valuable possession of the Mediterranean Section, the Curator thinks it is of the utmost importance that they should be added to, and where they are weak, strengthened. For

example, the Mycenaean, Geometric and Proto-Corinthian styles are at present scarcely represented at all. The contributing members of the Department can do much to help in this work. There must be at present in Philadelphia and its vicinity many Greek vases in private possession, some of which might eventually come to the Museum. As it is quite possible that some of these vases are of scientific value, the Curator hopes that any one having knowledge of such collections may inform him of them.

The Curator further believes that it is very important for the Museum to publish a simple catalogue of its collections, such, for example, as is presented to each person who enters the British Museum. A more detailed catalogue for the use of scholars is also desirable, and the Curator hopes that the articles on Greek vases which he is publishing in the *Transactions* may eventually form the basis of such a catalogue.

A few photographs of the sculptures have been placed on sale, and the number will be increased as fast as the sculptures are published.

WILLIAM N. BATES,
Curator.

JANUARY 8, 1907.

TO S. F. HOUSTON, ESQ.,
President of the Department of Archæology.

DEAR SIR: The collections made by the expedition to Alaska in 1905 were catalogued during the winter and the specimens were at the same time subjected to treatment for preservation. A brief report on the work of this expedition

was prepared and published in the Transactions of the Museum.

Mrs. Frishmuth has continued to make important additions to the collection of musical instruments. Mr. Charles S. Braddock, Medical Inspector to the Siamese Government, has presented a small collection of terra-cotta figures found by himself in a cave temple on the west coast of Siam. The late Jesse Y. Burke bequeathed a small collection of stone implements found in ancient village sites in Bucks County. Mrs. W. M. James has presented a bow and seven arrows. Miss Helen Lundy, of this city, has presented several pieces of carving from the northwest coast of America, and Miss Susan Randall has presented a collection of photographs of ruins in Mexico. A small but unusually interesting collection has been received from Rev. Mr. Huston, a missionary among the natives of South Australia.

In April I went to Monaco to attend the Congress of Prehistoric Archæology held there, as delegate from the American Anthropological Association. After my return I was occupied in preparing a descriptive catalogue of the Drexel fan collection and in attending to the publication of a new number of the Transactions. The fan catalogue, which is intended as a handbook for visitors, was printed during the summer at Mrs. Drexel's expense, and is now on sale at the Museum at a nominal price, which is considered preferable to free distribution.

In the spring a sum of money was presented by Mrs. H. H. Houston, through the president, for the construction of four exhibition cases according to plans drawn up by the Curator. These cases having been installed are giving great satisfaction, and indicate clearly the advantages of adequate cases constructed on the best principles. By the installation of these cases, the American side of the section has been vastly improved in appearance, the collections have

been rendered more secure and the capacity of the room increased. By continuing the construction of cases along the same lines, the Curator will be enabled to display the very valuable collections in the section in the most advantageous way, with due regard to the æsthetic side of Museum development as well as to the scientific interests involved, thereby greatly increasing the attractiveness as well as the usefulness of the exhibits and sustaining the best relation between the Museum and the public. At the same time, much more material can be placed on exhibition without overcrowding, and a maximum degree of security will be attained for the specimens.

During the summer a number of plaster copies were made of objects in the American archæological collections for exchange purposes, and we have secured as an exchange from the American Museum of Natural History in New York an excellent series of plaster casts made from life and representing the more important Indian tribes of North America. These will be used in exhibiting the very fine Indian costumes already in the Museum and those recently secured.

In behalf of the Museum Library Committee, I have to report that there have been received during the year 1906 exchanges, an increase of 41 over last year, and 14 volumes have been received as gifts.

During the College year 1905-1906 the demand for instruction in anthropology at the University was such that an additional course was added to the two already on the roster, and accordingly, at the request of the Museum Board, I devoted in all four hours a week throughout the year to the work of instruction, with results which were very gratifying.

Respectfully,

G. B. GORDON.

THE BABYLONIAN AND GENERAL SEMITIC SECTION.

S. F. HOUSTON, ESQ.,

President, Department of Archæology.

SIR: The chief work of the Curator, and those assisting him during the year, has been the preparation for publication of inscriptions belonging to the University and of some which are deposited in the Imperial Ottoman Museum. Three volumes of the series, "The Babylonian Expedition of the University of Pennsylvania," edited by Professor Hilprecht, the Curator, have appeared during the year, besides one being in press. Two volumes based on tablets which belonged to the administrative department of the Temple at Nippur were published by the Assistant Curator. The volumes bear the title: "Documents from the Temple Archives of Nippur." They are records of income taxes; business documents dealing with these revenues, including records of debts, loans and payments; besides a large number of payrolls in which the stipends paid by the Temple are recorded. Another volume entitled: "Legal and Business Documents from the time of the first dynasty of Babylon, chiefly from Sippar," was published by Dr. Hermann Ranke, formerly Harrison Research Fellow of the University. The tablets forming the basis of this publication belong to the collections purchased by members of the Babylonian Expedition while in service. The documents are largely of the type known as contract tablets, dealing with the purchase and sale of houses, slaves, etc., the hiring of servants, the loaning of money, etc., adoption texts, wills, decisions of judges, etc. The contribution which the Curator, Professor Hilprecht, has to offer is in press. It is entitled: "Mathematical, Metrological and Chronological Texts from the Temple Library of Nippur." These texts promise to throw considerable light upon the advanced knowledge of the early Babylonians, especially in mathematics.

A number of Assyriologists, including the Curator, are at the present time copying, deciphering and preparing texts for publication. During the coming year several volumes should appear, besides the one that is in the press.

The chief work besides that of publication has been the cataloguing of the material excavated at Nippur by the Babylonian Expeditions. About two thousand tablets have been classified and distributed in groups according to the contents of the inscriptions, preparatory for their publication.

Considerable preparation has also been made looking forward to a better display of representative inscriptions, properly labeled, in the light of our recent researches. Owing to the sickness of the Curator, this report is offered by the Assistant Curator.

ALBERT T. CLAY.

APPENDIX, XI.

REPORT OF THE PRESIDENT OF THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA, FOR THE YEAR 1906.

*To the Governor of the State of Pennsylvania, the Mayor
of the City of Philadelphia, the Board of Trustees of
the University of Pennsylvania and the Contributors
of the Hospital:*

The year 1906 was one of great prosperity to the Hospital. The buildings have been thoroughly renovated, painted and repaired wherever needed. The service has increased considerably over the year previous, the number of Hospital days being 84,154, against 81,938 for 1905. The number of patients admitted was 3,727, against 3,565 for 1905, of which 2,381 were free. The total cost of maintenance was \$205,982.28, and the total amount of indebtedness at the close of the year was \$14,352.15.

Through the generosity of Randal Morgan, Esq., we received \$5,000 to endow a bed in the name of Marshall Spring Shapleigh and wife; and also \$3,000 for the endowment of a bed in the children's ward in the name of Charles Eldridge Morgan and wife. We received from the estate of Mary M. Johnson, deceased, \$17,757.60 for the endowment of the ward for chronic diseases; and from a friend, given through Dr. George E. de Schweinitz, \$5,000, the income to be used for the benefit of any patient in the Hospital that he may designate. The management wish to thank Dr. de Schweinitz for fitting up the operating room for the

use of the eye ward of the Hospital. Also, through the generosity of Mrs. B. Frank Clyde, a large and extensive addition was made to the Maternity Hospital, now making this department one of the most spacious and convenient maternities in the city. The thanks of the committee are sincerely tendered to Mrs. Clyde.

In the fall of 1905 the Board of Women Visitors held a bazaar at Horticultural Hall for the benefit of the Hospital. It was one of the most successful affairs of its kind ever held in this city, the net results amounting to about \$14,000, which is being used by the ladies for the many necessities of the Hospital, and reflects great credit upon those who managed it.

During the past year the Trustees of the University reorganized the Board of Managers of the Hospital as follows:

Two lay members from the Board of Trustees.

Two members from the Faculty who shall be Professors of Medicine and Surgery.

One member who shall be a graduate of the Medical Department of the Alumni and subject to confirmation by the Trustees of the University.

Two members from the Board of Women Visitors, to be confirmed by the Trustees of the University.

Twelve members from the Contributors to the Hospital, one of whom may be a physician to be nominated by the Board of Managers of the Hospital and subject to confirmation by the Board of Trustees of the University.

In April, the following resolution was passed by the Board of Trustees of the University of Pennsylvania, viz.:

"Resolved, That all future appointees to the Hospital Staff shall be nominated by the Council of the Medical

Faculty, approved by the Board of Managers, and shall be subject to confirmation by the Trustees of the University of Pennsylvania."

The Executive Committee of the Hospital have shown during the past year the same untiring efforts to maintain the standard as well as endeavoring to promote more efficient service for the Hospital. In this endeavor, they have been materially assisted by our Superintendent, Miss Smith, and her assistants.

The management desire to acknowledge with thanks the many favors received from the Board of Women Visitors. To the Medical Staff, as well as to those connected with the Dispensaries, our thanks are again tendered.

JOHN SAILER,
President.

PHILADELPHIA, August 31, 1906.

APPENDIX XII.

REPORT OF THE PUBLICATION COMMITTEE.

To the Provost of the University:

SIR: During the year ending August 31, 1906, the following University publications were issued under the auspices of your Committee:

SERIES IN PHILOLOGY AND LITERATURE.

George Chapman and "The Tragedie of Chabot, Admirall of France." By Ezra Lehman.

SERIES IN POLITICAL ECONOMY AND PUBLIC LAW.

Consular Service of the United States. By Chester Lloyd Jones.

SERIES IN ZOOLOGY.

Contributions from the Zoological Laboratory, Volume XII, Eleven Separata.

Among the memoirs accepted for publication, but the appearance of which has been delayed for various reasons so that they do not fall within the year covered by this report, are:

SERIES IN PHILOLOGY AND LITERATURE.

The Hector of Germanie, or the Palsgrave Prime Elector. By Wentworth Smith. (Edited by Leonidas Warren Payne, Jr.)

Fletcher's "Royall King and Loyall Subject." By Kate Watkins Tibbals.

Name-Play in Plautus. By Charles J. Mendelsohn.

SERIES IN PHILOSOPHY.

The Datum of Knowledge; das Gegebene in the Transition from Kant to Fichte. By William T. Paullin, Jr.

Particular mention should be made of the generosity of a member of the Committee, Mr. Joseph G. Rosengarten, in meeting the expense of publication of the series of old English plays, which are being edited under the supervision of the Professor of English.

The importance of continuing and, if possible, of enlarging our facilities for the publication of original work done in the University is so generally recognized that it may be taken for granted. In publishing such work our University not only fulfils one of the highest ideals of an institution of learning, but also receives through exchange many valuable contributions from other institutions.

The list of one hundred and seventy-two institutions with which we exchange publications was printed in the last report of this Committee. This list has been extended during the year by the addition of the following institutions:

FOREIGN.

Berliner Mathematische Gesellschaft, Deutschland.

Freiburg Universität, Schweiz.

London, Royal Society, England.

Paris, Muséum D'Histoire Naturelle, France.

Paris, Université de, France.

Roma, Biblioteca Nazionale Vittorio Emanuele, Italia.

St. Pétersbourg, Académie Impériale des Sciences, Russia.

Toulouse, Université de, Haute-Garonne, France.

DOMESTIC.

Clarkson, Thomas S., School of Technology, Potsdam,
N. Y.

Field Columbian Museum, Chicago, Ill.

Maryland Historical Society, Baltimore, Md.

Missouri Historical Society, St. Louis, Mo.

Nebraska State Historical Society, Lincoln, Neb.

Rhode Island Historical Society, Providence, R. I.

Texas State Historical Association, Austin, Texas.

Texas, University of, Austin, Texas.

Wisconsin, State Historical Society of, Madison, Wis.

Within the year covered by this report the Library
received through exchange:

825 bound volumes.

6,411 unbound volumes and pamphlets.

Respectfully submitted,

EDWIN GRANT CONKLIN,
Chairman.

APPENDIX XIII.

REPORT OF THE DIRECTOR OF THE DEPARTMENT OF PHYSICAL EDUCATION.

To the Provost of the University.

SIR: I have the honor to submit to you the second annual report of the Department of Physical Education as reorganized under my directorship.

In pursuance of the plan of Physical Education as outlined in last year's report, gymnastic classes for those coming under the requirements were started November 6, 1905, with an enrolment of 1,489 students. With the exception of the comparatively small number who had taken the partial voluntary course of the year previous, the members were all beginners, and the exercises were not graded.

On the afternoon of December 15th, an exhibition was given in Weightman Hall to demonstrate the adaptability of the equipment of apparatus for the rapid handling of large classes. The exhibition opened with a drill which occupied the entire floor. Three minutes after the conclusion of this drill the floor was covered with all the apparatus in place, either let down from the iron-work of the roof or set up in sockets in the floor.

In the third part of the program the system of nets was demonstrated which divided the floor into three separate gymnasias. This equipment has proved to be exceedingly convenient and efficient.

In the spring an examination was made of the ability

of each member to accomplish certain feats, selected to include the largest muscular groups and the kinds of activity that would be most frequently called into play in ordinary life.

As soon as the weather permitted the character of the work was changed and became more athletic in character; and on the afternoon of the fourth day of May work in the other departments of the University was suspended for two hours in order to permit of a mass demonstration of all the classes, which took place on Franklin Field.

As this was purely voluntary and had to be given without any previous rehearsal, less than half the strength of the classes was represented on the field.

The drill consisted of the following:

PART I.

1. Running class formation.
2. Gymnastic drill in four parts: (1) Free movements for development of trunk, back, shoulders, and chest. (2) Boxing movements. (3) Elementary dancing steps. (4) Slow respiratory movements.
3. Running wheel in four divisions, ending with class formation for Part II.

PART II.

1. The start in sprinting.
 2. Clearing the low hurdles (2 ft. 6 in.).
 3. Three standing broad jumps.
 4. Putting 12-pound shot.
 5. Running high jump.
- Final March.

In this exhibition we demonstrated the possibility of adapting the ordinary athletic sports to the use of large classes. This exhibition, which was the first that has been attempted in College work, was watched with great interest by invited friends, many of them from a distance, and attracted a good deal of attention in the newspapers and magazines.

Too great praise cannot be given to Mr. J. Leonard Mason, Instructor in Gymnastics, for the efficient way in which the preparation and leading of this demonstration was conducted; and I may also mention in this connection the work of the Assistant Instructors, Mr. F. Homer Curtiss and Mr. John Pardue, and the class leaders, who gave their time and energy to the supervising of details.

During the past summer the course for this year was revised and graded by Mr. Mason and myself; but, unfortunately, our plan has had to be considerably changed on account of difficulties with the roster.

A week after the opening an examination of physical ability was given all classes, and they were divided, accordingly, into two grades or divisions. The exercises are so arranged that ten lessons are given on each piece of apparatus throughout the year to men in each grade.

To take, as an example, the test in rope climbing. All who failed in climbing the required distance were kept in the first grade and those who succeeded, in the second. The exercises of the first grade consist in comparatively easy movements, such as raising the weight by the arms, climbing with the aid of the arms and legs, and certain simple methods of descending a rope.

For the advanced grade exercises are taken that have more direct bearing on the utility of this exercise in cases of emergency. Men are shown how to descend a rope, using only one arm, carrying a burden on the other; how to jump

six feet or more and catch the rope before beginning to climb, and how to rest in various positions.

Such exercises are all designed with an eye to their direct bearing on physical efficiency or in the saving of life.

The organization of a corps of voluntary class leaders is also occupying a good deal of attention, and it is hoped by next season to have this corps sufficiently advanced by special instruction to oversee much of the elementary work of instruction. I expect also to require more hours and more exclusive attention to the class work from Mr. Mason, as he has heretofore coached two of the special teams in addition to his regular work of class instruction.

There are five classes daily, except on Saturday, when there are only two morning hours, the gymnasium being given over to voluntary work in the afternoon. The total enrolment in the classes is 1,819 men—an increase of 330 men over last year's numbers, as shown in the tabulated summary.

At present the day's work is so divided that the class begins and ends with deep breathing and exercises for the improvement of faulty posture—a defect so commonly found in the student. Already it is being frequently remarked that Pennsylvania students are becoming known by their erect and manly bearing.

Following is a comparison of the number of men in the regular classes and on the athletic squads in 1905 and in 1906:

	1905-06.	1906-07.
Number of men in regular classes	1,489	1,819
Locker-holders using Field and Gymnasium, including those taking prescription work.	437	500
	—	—
Total number using Gymnasium and Franklin Field	1,926	2,319

NUMBER OF MEN ON ATHLETIC SQUADS.

	1905-06.	1906-07.
Association football	14	20
Baseball	35	50 (Est.)
Basket-ball	42	47
Crew	106	140 (Est.)
Fencing	20	27
Football	73	84
Gymnastic team	10	14
Lacrosse	18	25 (Est.)
Swimming	41	70
Track	47	113
Wrestling	19	31

These figures show a gratifying increase in numbers, and also show that the purpose of the Department, to reach the main body of the students and give them the benefits that were formerly the privilege of the few, is being carried out.

The following is the report of the Swimming Instructor:

	1905-06.	1906-07.
Number of swimming certificates presented	697	577
Number of men who could not swim.....	352	243
Number of men who could swim.....	345	334
Number of men who were taught	220	...

The number of men now under instruction will show a large increase in those taught this most necessary accomplishment.

Mr. Leonardo Terrone was last year put upon the regular staff as Instructor in Fencing, an appointment which has fully justified itself in the results obtained.

Boxing, last year, was not very satisfactory, but I trust that the arrangements just completed with William J. Herrmann will give the best instruction at the least possible charge to the student.

The Wrestling Club has been under the direct charge of Mr. J. Leonard Mason, as usual.

Last fall there were 1,049 medical examinations made, and in the following spring there were 143 re-examinations. This year there were 818 first-year students examined, and prescriptions were written out for various defects that could be cured or improved by exercise in 644 cases. The nature of these defects may be found in the following table, which does not include the large number of men who had such conditions as hernia, heart weakness and various unclassified illnesses and defects to whom advice was given as to their regimen.

TABLE OF DEFECTIVE CASES.

Flat foot	95 cases
Round shoulders and flat chest	191 cases
Right or left shoulder low	123 cases
Spinal curvature	103 cases
Constipation	132 cases
<hr/>	
Total	644 cases

In these cases, after the prescription card has been filled, the student is shown the exercises and reports from time to time for further examination and directions.

There is a marked increase in the number of men who come in to inquire about their physical condition, and the steps to take towards improving it. This is encouraging, as showing that a genuine interest in their physical welfare is undoubtedly growing among them.

For such men as cannot take the work of the regular classes on account of conflicting outside duties, by which they are earning their way through College, or for other sufficient reasons, a special form has been designed which includes a course that can be taken at home after a certain

amount of practice under supervision. This fills a well-marked field of our work.

During last year I delivered five lectures to the third- and fourth-year students in the Medical Department, taking up the application of exercise to the following conditions :

Lecture No. 1.—Faults of Posture and Flat Foot.

Lecture No. 2.—Lateral Curvature of Spine.

Lecture No. 3.—Diseases of the Nervous System.

Lecture No. 4.—Diseases of Nutrition.

Lecture No. 5.—Diseases of the Heart and Circulatory System.

This year this course of lectures will be still further extended.

Papers were also read on subjects connected with the Department before the Society of Life Insurance Examiners at the American Medical Association in Boston, the College of Physicians in Philadelphia, and the Society of College Directors in New York.

In October last, at the County Medical Society, Dr. Posey, the Ophthalmologist to the Department, and myself, presented a joint paper on the "Results of the Examinations of Students' Eyes in the Department," which was based upon the examination of 883 students.

The examination of the eyes was separate from that of the general physical condition. There are fewer absences from illness and less interruption of studies after the correction of refraction errors. It was shown that the increase of near-sightedness could be prevented by proper care of the eyes. Of the students examined, 30.34 per cent had defective vision in one or both eyes. Of the 883 examined, 14.70 were myopic, while the remainder were either hypermetropic or emmetropic. In the comparison to ascertain the influence

of age and study upon the refraction, it was found that, among 663 students in the two lower classes, 87.25 per cent were hypermetropic and 12.75 per cent myopic. Five per cent more of myopia was found in the professional schools than in the College, presumably because students of the College Department came from private schools where the eyes were properly protected, while the others came frequently from rural communities where accurate refraction was impossible.

Of the 883 examined, 609 had full visual acuity in but one eye, and 180 had sub-normal vision in both. Of those complaining of headache, 7.59 per cent had sub-normal vision, while the remaining 92.41 per cent had full visual acuity. Scoliosis was present in 6.68 per cent, and among them the vision of one eye was perceptibly lower than that of its fellow in 13.79 per cent, supporting the inference of some of the possible responsibility of ocular errors for this abnormality. The figures were given to show the importance of including careful ocular tests as part of the physical examination of every student.

It was quite common to find the characteristic tilting of the head, defective posture, flat chest, and protruding abdomen in men having eye defects. In order to correct these faulty postures the correction of the eye defects is first necessary, particularly in astigmatism and myopia.

RECOMMENDATIONS.

The present arrangements for lighting Weightman Hall are inadequate, and I would respectfully suggest the placing of a series of incandescent lamps along the sides of the hall, or the addition of a number of arc lights equal to the present equipment.

It is an almost impossible task to arrange the gymnasium hours in such a way as to allow of graded and

logical work at present, owing to the constant changes that occur in the roster and the division of classes into small sections. I would strongly recommend, therefore, that two definite periods a week be reserved for Physical Education in the College, as has been done in the professional departments. By setting aside these two definite periods a week—a provision which has to be made in any case—the grading and logical progression of our courses of exercise would be greatly simplified.

The whole is respectfully submitted.

R. TAIT MCKENZIE.

APPENDIX XIV.

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TREASURER'S REPORT.



For the Year Ending August 31, 1906.



REPORT OF THE TREASURER OF THE UNIVERSITY OF PENNSYLVANIA.

GENERAL BALANCE SHEET.

Assets:

I. Real Estate	\$6,635,578 94	
II. Libraries, Museums, Apparatus, Furniture and Perpetual Insurance deposits	1,941,870 74	
III. Securities:		
Railroad and Corporation Bonds.....	\$3,171,438 63	
Stocks	459,278 88	
	<hr/>	3,630,711 96
IV. Mortgages:		
On property in Philadelphia and vicinity.	\$348,725 00	
On property in Chicago, etc.....	93,500 00	
	<hr/>	442,225 00
V. Ground Rents	57,153 95	
VI. Loans on Collateral.....	53,990 70	
VII. Cash Balance in Various Trust Companies and Banks:		
To credit of Investment funds:		
University Trusts.....	7,988 81	
Building funds:		
University	\$84,967 20	
Hospital	6,907 60	
	<hr/>	91,874 80
Hospital funds.....	9,631 50	
To credit of funds not for Investment:		
University	11,128 91	
Hospital	4,335 75	
To credit of Income:		
University	21,461 42	
To credit of Administration.....	117,948 13	
	<hr/>	\$13,025,400 61
Liabilities:		
Bonds Central Light and Heat Station	\$20,000 00	
Mortgage, No. 3451 Woodland Avenue	5,500 00	
Mortgage, No. 3316 Woodland Avenue	4,500 00	
Advances to Trusts by Administration	19,781 47	
Advances to Land purchases, Building funds, etc.....	28,809 23	
Loan to Veterinary Hospital.....	5,400 00	
	<hr/>	83,990 70
Excess of Assets. :	\$12,941,409 91	

REAL ESTATE.

IN TWENTY-SEVENTH WARD.

Plot of ground between Thirty-fourth and Thirty-sixth with College Buildings and Medical Hall.....	\$643,799 27
Medical Laboratory	69,414 15
Plot of ground between Thirty-sixth, Spruce, Woodland Avenue, Woodland Cemetery and Guardian Street.....	250,000 00
Library Building.....	209,142 08
Biological Building.....	36,844 98
Plot of ground between Connecting Railway and Thirty-fourth Street	250,000 00
Plot of ground Thirty-third and Marston Streets.....	12,764 46
Plot of ground between Thirty-sixth and Spruce Streets, Woodland Avenue and Police Station.....	20,000 00
John Harrison Laboratory of Chemistry.....	113,607 82
Henry Howard Houston Hall.....	134,544 57
Dormitory Building, First Section.....	344,268 67
Dormitory Building and Memorial Tower, Second Section...	242,048 01
Dormitory Building, Third Section.....	50,580 33
Dormitory Building, Fourth Section.....	38,364 14
Central Light and Heat Station.....	186,050 83
Department of Hygiene Building.....	50,000 00
Department of Hygiene Laboratory.....	15,001 75
Department of Dentistry Building.....	129,851 08
Dining Hall	14,799 58
Law School Building and Lot.....	432,187 38
Museum Science and Art.....	391,831 08
Randal Morgan Laboratory of Physics.....	76,885 90
Premises Thirty-third and Locust Streets.....	29,125 00
Premises Woodland Avenue between Thirty-sixth and Thirty-seventh Streets	30,000 00
New Medical Laboratory.....	622,894 08
New Engineering Building.....	482,948 60
Plot of ground, Thirty-fourth to Thirty-fifth and Spruce to Pine Streets	125,000 00
Hospital Buildings	243,743 92
Gibson Wing.....	65,000 00
Nurses' Home.....	20,000 00
Nurses' Home New Building.....	28,598 37
Mortuary Building.....	11,000 00
Maternity Building.....	29,000 00
Agnew Memorial Pavilion.....	166,645 57
Pepper Clinical Laboratory.....	50,000 00
Clyde Maternity Building.....	2,092 40
James Dundas Clinic.....	6,098 67
Anna D. Scott Memorial.....	15,000 00
X-Ray Plant.....	25,000 00
Sun Parlor.....	7,867 91
Sun Parlor, Ward G.....	18,654 62
Isolation Ward.....	25,862 47
New Laundry.....	14,681 14
Reese Wall Flower Observatory Grounds.....	15,821 84
Professor's Residence on Observatory Grounds.....	11,808 25
Marine Biological Laboratory at Sea Isle City, N. J.....	3,700 00

Treasurer's Report.

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Premises No. 224	Stampers Street (Fifth Ward).....	\$1,800 00
" " 58	North Fourth Street (Sixth Ward).....	20,000 00
" " 60	" " " " " ".....	30,000 00
" " 62	" " " " " ".....	18,800 00
" " 64	" " " " " ".....	14,600 00
" " 66	" " " " " ".....	20,000 00
" " 66	" " " " " (rear) ".....	6,000 00
" " 29 and 31 N.	Seventh St. (Sixth Ward))..	20,980 00
" " Bread and Quarry Sts.	(Sixth Ward).....	1,000 00
" " 3328, 3330, 3332, 3334, 3336, 3338	Walnut Street	37,000 00
" " 3340, 3342, 3344, 3346, 3348, 3350	Walnut Street	47,500 00
" " 3316	Walnut Street.....	5,268 39
" " 1021	Chestnut Street.....	44,000 00
" " 1029	Chestnut Street.....	50,000 00
" " Chestnut Street	Opera House.....	350,000 00
" " 3451	Woodland Avenue.....	5,500 00
" " 4053	Spruce Street.....	6,500 00
" " 4057	" " " ".....	6,700 00
" " 4059	" " " ".....	7,000 00
" " 249	South Forty-first Street.....	4,800 00
" " 3011	Girard Avenue (Twenty-ninth Ward).	5,300 00
Twenty-three and one-half acres on Delaware River (in	Thirty-ninth Ward).....	100,000 00
Two and eighty-seven one-hundredths acres on Meadow	Street (Thirty-ninth Ward).....	20,000 00
Farm property in Glenloch, Chester County, Pa.....		29,782 50
About seven hundred acres in Elk and McKean Counties, Pa.		5,054 71
Sundry Lots of ground in Manchester, Mass.....		15,463 42
Sundry Lots of ground in Holly Beach, N. J.....		1 00
		<u><u>\$6,635,578 94</u></u>

LIBRARIES, MUSEUMS, APPARATUS, FURNITURE, AND PERPETUAL INSURANCE.

College Apparatus and furniture.....	\$122,883 28	
Department of Medicine Apparatus and furniture	101,560 42	
Department of Law Apparatus and furniture	146,419 04	
Department of Dentistry Apparatus and furniture	28,850 08	
Department of Hygiene Apparatus and furniture	21,024 86	
Department of Veterinary Medicine Apparatus and furniture.....	11,422 00	
University Library—Books, etc., Apparatus and furniture	477,720 04	
New Engineering Building Apparatus and furniture	65,566 47	
Museum Science and Art Collections, Apparatus and furniture.....	690,000 00	
New Medical Laboratories, Apparatus and furniture	63,792 84	
Randal Morgan Laboratory of Physics, Apparatus and furniture	21,514 18	
Wistar and Horner Museum, Collections and furniture	40,000 00	
Towne fossils, collections and furniture.....	5,011 13	
Flower Observatory Apparatus and furniture	24,098 78	
Hospital furniture	60,511 43	
Houston Hall furniture.....	22,891 21	
Dormitory furniture	12,944 38	
Dining Hall furniture.....	1,200 00	
Orthopaedic Machine Shop.....	2,000 00	
X-Ray Apparatus	5,000 00	
	<hr/>	\$1,922,410 12
Perpetual Insurance on College Buildings....	\$7,689 99	
On Hospital Buildings	4,237 85	
“ Hospital Buildings, Gibson Wing....	348 35	
“ Hospital Buildings, Nurses’ Home...	765 00	
“ Biological Buildings	300 00	
“ Central Light and Heat Building....	1,000 00	
“ Department of Hygiene Building.....	650 00	
“ Chemical Laboratory Building.....	1,051 35	
“ Department of Dentistry.....	2,146 35	
“ Flower Observatory Building.....	188 13	
“ Trust properties in City.....	585 60	
	<hr/>	18,960 62
		<hr/>
		<u>\$1,941,370 74</u>

SECURITIES.

RAILROAD AND CORPORATION BONDS.

	Cost.
58,000 Atlanta Gas Light Co. 1st Mtg. 5's, 1947.....	\$58,750 00
15,000 Atlantic Coast Line Railway 1st cons. 4's, 1952...	14,250 00
103,000 Athletic Association University of Pennsylvania...	103,000 00
51,000 Atchison, Topeka & Santa Fe Railway Gen. Mtg. 4's 1995	50,777 50
25,000 Baltimore & Ohio R. R. 1st Mtg. 4's, 1948.....	25,050 00
72,000 Baltimore & Ohio R. R. prior lien 3½'s, 1925.....	68,425 00
55,000 Baltimore & Ohio R. R. prior lien 3½'s, 1925, Southwestern Division	50,400 00
17,000 Bethlehem Iron Co. 1st Mtg. 5's, 1907.....	17,000 00
50,000 Bethlehem Steel Co. purchase money 6's, 1908.....	60,000 00
30,000 Birmingham Railway Light & Power Co. Gen. Mtg. 4½'s, 1954	28,875 00
3,300 Bloomsburg & Sullivan R. R. 1st Mtg. 5's, 1923...	3,300 00
1,700 Bloomsburg & Sullivan R. R. 2d Mtg. 5's, 1928....	1,683 66
2,000 Brooklyn, N. Y., Union Gas Co. 1st Mtg. 5's, 1945...	2,000 00
500 Brooklyn, N. Y., Union Gas Co. Debenture...	500 00
2,000 Buffalo & Susquehanna R. R. 1st Mtg. 5's, 1913....	1,990 00
15,000 Boston & Worcester Street Railway 1st Mtg. 4½'s, 1923	14,975 00
20,000 Central Light & Heat Station 5 4-10's.....	20,000 00
25,000 Central Pacific Railway 1st Refund Mtg. 4's, 1949...	25,000 00
1,000 Central R. R. of New Jersey Gen. Mtg. 5's, 1987...	1,120 00
75,000 Chesapeake & Ohio R. R. Co. Gen. Mtg. 4½'s, 1992	75,000 00
10,000 Chesapeake & Ohio Railway Car Trust 4's, 1913...	9,657 00
5,000 Chicago Gas Light & Coke Co. 1st Mtg. 5's, 1937...	5,000 00
29,000 Chicago & Erie R. R. 1st Mtg. 5s, 1982.....	31,975 00
45,000 Chicago, Burlington & Quincy Railway, Illinois Di- vision 3½'s, 1949	41,118 75
15,000 Choctaw, Oklahoma & Gulf R. R. Gen. Mtg. 5's, 1919	15,050 00
5,000 Choctaw, Oklahoma & Gulf R. R. cons. 5s, 1952...	5,000 00
22,000 City of Galveston, Texas, 40 years Ltd. 5's, 1934...	22,000 00
1,000 City of Pittsburg Refunding 5's, 1910.....	1,180 00
25,000 Citizens' Railway, Indianapolis, 1st cons Mtg. 5's 1933	24,000 00
16,000 Connecticut Railway & Lighting Co. 1st Mtg. 4½'s, 1951	16,000 00
25,000 Consumers' Light, Heat & Power Co. 1st Mtg. 5's, 1938	25,000 00
2,500 County of St. Louis, Minn., 6's, 1907.....	2,500 00
60,000 Denver & Rio Grande R. R. 1st Consol. Mtg. 4's, 1936	59,555 00
90,000 Equitable III. Gas Light Co. 1st Mtg. 5's, 1928....	91,820 00
64,800 Electric & People's Traction Trust Certif. 4's, 1945...	64,423 75
53,000 Erie R. R. prior lien 4's, 1906.....	48,062 50
12,000 Elmira & Williamsport R. R. Co. Income Bonds, 5's, 2862	12,000 00
30,000 Evansville & Terre Haute R. R. 1st Mtg. 5's, 1942...	30,600 00

	Cost.
5,000 Fairmount Coal & Coke Co. 1st Mtg. 4's, 1919..	\$5,000 00
5,000 Georgia Railway & Electric Co. 1st Mtg. 5s, 1932..	5,000 00
30,000 Hudson County Gas Co. 1st Mtg. 5's, 1949.....	30,000 00
25,000 Imperial Japanese Government 2d 4½'s, 1925.....	22,688 75
25,000 Indiana, Columbus & Eastern Traction Co. Gen. Mtg. 5's, 1926.....	23,500 00
5,000 Indiana Union Traction 1st Mtg. 5's, 1933.....	5,000 00
15,000 Indianapolis Street Railway Co. Gen. Mtg. 4's, 1933	13,037 50
35,000 Indianapolis Traction & Terminal Co. 1st Mtg. 5's, 1933	33,897 50
50,000 International Navigation Co. 1st Mtg. 5's, 1929	50,000 00
91,000 International Nickel Co. Sinking Fund 5's, 1932...	91,000 00
13,000 Iron Mountain R. R. Car Trust Series R. 5's, 1912.	13,000 00
25,000 Jersey City & Bergen Railway 1st Mtg. 4½'s, 1923.	25,937 50
60,000 Jersey City, Hoboken & Paterson Street Railway 1st Mtg. 4's, 1949.....	50,000 00
23,000 Kansas City, Mo., Gas Co. 1st Mtg. 5's, 1922.....	21,882 50
34,000 Lehigh Valley Coal Co. 1st Mtg. 5's, 1933.....	33,850 00
1,350 Lehigh Coal & Navigation Co. Cons. Loan 4½'s, 1914	1,471 50
8,000 Lehigh Coal & Navigation Co. 4's, 1914.....	8,000 00
6,000 Lehigh Valley R. R. Car Trust 4½'s, 1910.....	6,120 00
5,000 Lehigh Valley R. R. Reg. 7's, 1910.....	5,000 00
1,000 Lehigh Valley R. R. Consol. Mtg. 4½'s, 1923...	1,060 00
26,000 Lehigh Valley R. R. Gen. Consol. Mtg. 4's, 2003...	25,980 00
25,000 Lehigh Valley Transit Co. 1st 4's, 1935.....	23,000 00
1,000 Lehigh & New England Cons. Mtg. 5's, 1953.....	1,000 00
8,000 Lehigh & Wilkes-Barre Coal Co. 4½'s, 1910.....	8,000 00
52,000 Long Island R. R. Unified Mtg. 4's, 1949.....	52,225 00
51,000 Louisville & Nashville R. R. Unified Gold 4's, 1940	51,197 50
5,000 Metropolitan Street Railway, Kansas City, Mo., Gen. Mtg. 5's, 1909.....	4,894 17
45,000 Missouri, Kansas & Texas 1st Mtg. 4's, 1990.....	44,743 75
25,000 Market St. Elevated Passenger Railway 1st Mtg. 4's, 1955	25,000 00
15,000 Montreal Light, Heat & Power Co. 1st Mtg. 4½'s, 1932	15,000 00
8,000 Mortgage Trust Co. 4's, 1911.....	6,880 00
21,000 New York, Phila. & Norfolk R. R. Co. 1st Mtg. 4's, 1939	21,000 00
13,000 Norfolk & Western R. R. Co. 1st Mtg. 6's, 1932..	13,000 00
55,000 Norfolk & Western R. R. Co. 1st Cons. Mtg. 4's, 1906	54,018 75
25,000 Norfolk & Western R. R. Co. Equip. Trust 4's, 1909	24,522 50
10,000 Norfolk & Western R. R. Co. Equip. Trust 4's, 1910	9,653 00
15,000 Norfolk & Western R. R. Co. Equip. Trust 4's, 1911	14,749 50
10,000 Norfolk & Western R. R. Co. Equip. Trust 4's, 1913	9,642 20
1,000 Northern Pacific R. R. Lien & Land Grant 3's, 2047	770 00
31,000 Northern Pacific R. R. prior lien 4's, 1907.....	31,000 00

Treasurer's Report.

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	Cost.
25,000 North Hudson Light, Heat & Power Co. Mtg. 5's, 1938	\$25,000 00
1,000 North Penna. R. R. Gen. Mtg. 3 3-10's, 1953.....	1,000 00
22,000 Ohio River R. R. 1st Mtg. 5s, 1938.....	22,510 00
3,000 Omaha & Council Bluffs Railway 1st Cons. Mtg. 5's, 1928	3,000 00
10,000 Oregon Short Line 25-year Refund 4's, 1929.....	9,687 50
1,000 Penna. & N. Y. Canal & R. R. Cons. Mtg. 4's, 1939	980 00
2,000 Penna. & N. Y. Canal & R. R. Cons. Mtg. 5's, 1939	2,240 00
30,000 Penna. Steel Equip. Trust 3½'s, 1908.....	28,912 50
20,000 Penna. Steel Equip. Trust 3½'s, 1909.....	19,624 80
500 Phila. Country Club 1st Mtg. 5's, 1940.....	500 00
9,000 Phila. & Erie R. R. Gen. Mtg. 5's, 1920.....	10,665 00
2,000 Phila. & Erie R. R. Reg. 4's, 1920.....	2,180 00
21,000 People's Pass. Railway Stock Trust 4's, 1943..	21,735 00
20,000 Phila. Electric Gold Trust 5's, 1918.....	19,993 75
3,000 Phila. & Reading R. R. Cons. 7's, 1911.....	3,000 00
25,000 Phila. & Reading R. R. 4's, 1937	25,000 00
1,000 Phila., Wilmington & Baltimore R. R. Stock Trust 4's, 1921	1,085 00
25,000 Phila. & West Chester Traction Co. Gen. Mtg. 4's, 1954	22,937 50
40,000 Pittsburg Consol. Gas Co. 1st Mtg. 5's, 1948.....	41,000 00
3,000 Pittsburg, Shenango & Lake Erie R. R. 1st Mtg. 5's, 1940	3,000 00
25,000 Phila. & West Chester Traction Co. Gen. Mtg. 4s, 1954	22,937 50
10,000 Raleigh & Gaston R. R. 1st Mtg. 5's, 1947.....	10,332 50
125,000 Reading Co. & P. & R. Coal & Iron Co. Gen. Mtg. 4's, 1997	118,201 25
15,000 Reading Co. (Jersey Central Collateral) 4's, 1951..	14,955 00
500 Roby St. Dock & Factories Co. 6's, 1907.....	500 00
7,000 Rochester Railway & Light Co. 5's, 1954.....	7,000 00
111,000 San Antonio & Aransas Pass R. R. 1st Mtg. 4's, 1943	107,405 00
25,000 St. Louis Merchants' Bridge Co. 1st Mtg. 6's, 1929	25,000 00
25,000 Schuylkill Traction Co. Gold Mtg. 5's, 1943.....	25,000 00
21,000 Second Ave. (Pittsburg) Traction Co. 1st Mtg. 5's, 1934	21,000 00
25,000 St. Louis Merchants' Bridge Co. 1st Mtg. 6's, 1929	25,000 00
20,000 St. Louis Iron Mountain & Southern R. R. Land Grant 5's, 1931.....	20,000 00
25,000 St. Louis Terminal Cupples Station & Property 1st Mtg. 4½'s, 1917.....	24,468 75
25,000 St. Louis, Iron Mountain & So. R. R. 1st Mtg. 4's, 1933	24,250 00
10,000 St. Louis, Memphis & Southeastern R. R. Co. 4½'s, 1909	9,900 00
5,000 Southern Pacific R. R. Stock Collat. 4's, 1949.....	5,000 00
8,000 Sunbury, Hazleton & Wilkes-Barre R. R. 1st Mtg. 5's, 1928	7,450 00
400 Sunbury, Hazleton & Wilkes-Barre R. R. 2d Mtg. 6's, 1938	393 50
1,000 Susquehanna Coal Co., guar. by Penna. R. R. Co., 6's, 1911	1,000 00

	Cost.
10,000 Syracuse Rapid Transit Co. 1st Mtg. 5's, 1946	\$10,000 00
10,000 Terminal Railway Association, St. Louis, Gen. Mtg. 4's, 1953	9,850 00
10,000 Third Ave. R. R. 1st Consol. Mtg. 4's, 2000.....	10,150 00
50,000 Toledo, St. Louis & Western R. R. Co. prior lien gold 3½'s, 1925	45,488 25
3,000 Toledo, St. Louis & Western R. R. Equip Trust 4's, 1910	2,929 80
25,000 Toledo, Ohio, Electric St. Railway Co. 1st Mtg. 5's 1912	25,000 00
1,000 Tuckerton R. R. Co. 1st Mtg. 6's, 1910.....	1,000 00
20,000 Union Pacific R. R. 1st Mtg. land grant 4's, 1947..	18,500 00
25,000 United Railways Co. gold Trust 4's, 1949.....	21,250 00
50,000 United Railways of St. Louis 1st gen. Mtg. 4's 1934	45,375 00
7,000 United Traction Co., Pittsburg, Gen. Mtg. 5's, 1997	7,280 00
600 University Club Gold 5's, 1922.....	600 00
10,400 Veterinary Hospital Bonds.....	10,400 00
13,000 Wabash R. R. Co. 2d Mtg. 5's, 1939.....	13,000 00
25,000 Washington Rwy. & Elec. Co. Cons. Mtg. 4's, 1951	22,812 50
82,000 West Chester Lighting Co. 1st Mtg. 5's, 1950.....	32,140 00
57,000 Western N. Y. & Penna. R. R. Gen. Mtg. 4s, 1943	54,411 25
23,000 Wheeling & Lake Erie R. R. 1st Consol. Mtg. 4's, 1949	21,562 50
34,000 Williamsport Gas Co. 1st Mtg. 5's, 1939.....	34,420 00
40,000 Wilmington & Chester Traction Co. Collat. Trust 5's, 1918	40,632 50
2,500 Wilmington, Columbia & Augusta R. R. 1st Mtg. 6's, 1910	2,500 00
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	<u>\$3,171,438 63</u>

STOCKS.

		Cost.
10	Shares American Dredging Co.....	\$1,000 00
10	" American Snuff Co., pfd.....	1,000 00
27	" Brooklyn Union Gas Co., common.....	2,160 00
17	" Continental Pass Rway. Co.....	2,635 00
500	" Delaware & Bound Brook R. R.....	105,500 00
80	" Fidelity Trust Co.....	35,600 00
10	" Green & Coates Pass Rway. Co.....	1,580 00
50	" Germantown Pass Rway. Co.....	7,250 00
86	" Insurance Co. of North America.....	2,022 00
20	" Iron Mountain Car Trust.....	20,344 00
16	" Lehigh Valley R. R., pfd.....	800 00
4	" Lehigh Valley R. R., common.....	176 00
10	" Lehigh Coal & Navigation Co.....	500 00
61	" Norfolk & Western R. R.....	5,550 00
17	" North Penna. R. R.....	1,836 00
475	" Pennsylvania R. R.....	28,911 08
2,238	" Phila. & Reading R. R. 2d pfd.....	107,042 00
72	" Provident Life & Trust Co.....	44,482 00
78	" Penna. Salt Mfg. Co.....	7,795 50
350	" Phila. Traction Co.....	34,183 75
10	" Phila. Co. common.....	500 00
12	" Phila. & Trenton R. R. Co.....	8,348 00
11	" Phila., Germantown & Norristown.....	1,815 00
34	" Safe Deposit & Trust Co., Pittsburg, Pa....	7,370 00
9	" Second & Third Sts. Pass. Rway. Co.....	2,727 00
120	" William Cramp & Sons Ship & Engine Build- ing Co.....	6,000 00
17	" Western National Bank.....	1,530 00
25	" Union Pacific R. R. pfd.....	1,500 00
500	" United Traction Co. pfd., Pittsburg, Pa.....	25,000 00
4	" United N. J. R. R. & Canal Co.....	1,116 00
		<hr/>
		\$459,273 33
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MORTGAGES.

ON PROPERTY IN PHILADELPHIA AND VICINITY.

No. 707 Lydia Street.....	\$700 00
Wallace and Nineteenth Streets.....	6,000 00
Lancaster Avenue and Rockland.....	2,750 00
Auburn and Tenth Streets.....	1,500 00
Washington Avenue and Twenty-first Street.....	35,000 00
No. 4044 Powelton Avenue	3,000 00
" 2262, 2318, 2320 North Front Street.....	8,000 00
" 1843 Mount Vernon Street	2,700 00
" 2977 Frankford Avenue.....	4,000 00
" 2987 Frankford Avenue.....	4,000 00
Camden, N. J.....	7,500 00
Thirty-fifth Ward, City.....	70,000 00
No. 549 North Second Street.....	3,000 00
Manchester, Mass.....	1,000 00
Gray's Ferry Road and Thirtieth Street.....	2,000 00
No. 3451 Woodland Avenue.....	5,500 00
South, Marston and Thirty-third Streets.....	35,000 00
No. 2504 North Broad Street.....	5,500 00
No. 131 Richmond Street	1,500 00
Moreland Township, Montgomery Co., Pa.....	3,300 00
No. 2224 Montrose Street, Phila.....	600 00
West Chester Road, Chester Co., Pa.....	111,175 00
Cape May County, N. J.....	35,000 00
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	\$348,725 00
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COUPON MORTGAGES.

In Chicago, Illinois.....	\$25,000 00
" " "	7,500 00
" " "	20,000 00
" " "	7,000 00
" " "	2,500 00
" " "	2,000 00
" " "	16,000 00
" " "	6,500 00
" " "	7,000 00
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	\$93,500 00
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GROUND RENTS IN PHILADELPHIA.

No. 29 North Sixth Street.....	\$2,500 00
" 533 North Front Street.....	428 67
" 535 North Front Street.....	428 67
" 537 North Front Street.....	428 67
Green and New Market Streets.....	111 11
Moore and Otsego Streets.....	3,000 00
Oakford, Manton and Twenty-second Streets, six at \$800 each	4,800 00
Stiles and Nineteenth Streets.....	900 00
Gray's Ferry Road.....	42,519 00
No. 13 and 15 Parkham Street.....	400 00
" 618 South Seventh Street.....	444 50
" 128 North Water Street.....	1,133 33
Lebanon, Pa.....	66 00
	<hr/>
	\$57,158 95
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Loans on Collateral.....	\$874 63
" " "	18,908 84
" " "	10,123 40
" " "	5,000 00
" " "	5,000 00
" " "	8,582 24
" " "	108 59
" " "	5,400 00
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	\$53,990 70
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UNIVERSITY ENDOWMENTS.

AUGUST 31st, 1906.

	Amount Invested.	Amount Uninvested.
General Fund.....	\$3,074,995 64	\$2,048 56
J. Herman Raht Fund.....	250 00	
Phi Kappa Sigma Fund.....	400 00	
Keble Fund.....	13,193 41	
Elliott Cresson Fund.....	4,419 33	
Tobias Wagner Fund.....	5,300 00	
Bloomfield Moore Fund.....	15,000 00	
Thomas A. Scott Fund.....	50,000 00	
John H. Towne Fund.....	449,769 01	211 63
John Welsh Fund.....	52,824 89	8 27
A. Whitney Fund.....	50,080 68	103 75
Scholarship Fund.....	4,644 57	
Benjamin Franklin Scholarship Fund.....	10,026 12	
Samuel V. Merrick Scholarship Fund.....	3,560 60	
Class 1878 Scholarship Fund.....	5,000 00	
Matthew Baird Scholarship Fund.....	5,013 06	
E. Otis Kendall Scholarship Fund.....	5,000 00	
Adam Seybert Fund.....	53,334 49	11 25
Chair of Christian Ethics Fund.....	3,015 36	
Alumni Hall Fund.....	6,663 79	
Hector Tyndale Fellowship Fund.....	12,207 28	
S. W. Roberts Fund.....	914 83	200 00
Wharton School Fund.....	529,425 00	
Assyrian Fellowship Fund.....	189 55	
Pepper Professorship of Hygiene Fund.....	59,400 00	
J. Rhea Barton Fund.....	49,827 98	42 50
J. Gillingham Fell Fund.....	1,243 69	
Auxiliary Faculty of Medicine Fund.....	31,487 96	60 98
Leidy Chair of Anatomy Fund.....	1,994 49	
Botanic Garden Fund.....	4,302 99	
Department of Biology Fund.....	63,146 22	9 00
I. V. Williamson Fund.....	47,488 00	42 00
George S. Pepper Residuary Legatee Fund..	37,288 87	65 00
Frances S. Pepper Scholarship Fund.....	7,131 25	18 75
Chair of Pedagogy Fund.....	250 00	
Henry Reed Prize Fund.....	743 12	
Latin Prize Fund.....	1,025 80	
Oratory Prize Fund.....	360 80	
English Composition Prize Fund.....	200 00	
Arthur Spayd Brooke Memorial Prize Fund.	1,000 00	
J. Warner Yardley Prize Fund.....	500 00	
Class 1880 Prize Fund.....	1,000 00	
Allen Memorial Prize Fund.....	1,000 00	
P. Pemberton Morris Prize Fund.....	1,000 00	
Philo S. Bennett Prize Fund.....		400 00
Joseph M. Bennett Bequest Fund.....	547,537 25	1,953 64
Rev. C. P. Krauth Library Fund.....	1,612 06	9 00
Agriculture Library Fund.....	916 00	

Treasurer's Report.

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	Amount Invested.	Amount Uninvested.
Pepper Medical Library Fund.....	\$7,693 19	\$15 00
Tobias Wagner Library Fund.....	12,111 59	43 08
J. B. Lippincott Library Fund.....	7,000 00	
Isaac Norris Library Fund.....	5,210 69	23 00
Reese Wall Flower Fund.....	191,470 37	11 87
John Harrison Laboratory of Chemistry Fund	114,581 17	
Veterinary Fund	30,900 70	832 50
Joseph M. Bennett Fund (Bennett Hall)....	17,500 00	
Howard Houston Hall Fund.....	157,435 78	
Howard Houston Hall Endowment Fund...	500 00	
Dormitory Building Fund, First Section....	351,016 58	
Dining Hall Fund.....	14,799 58	
Dental Hall Building Fund.....	158,591 01	
Wistar and Horner Museum Fund.....	40,110 11	
Department of Law Fund	7,735 08	
John F. Frazer Fellowship Fund.....	11,219 37	40 00
Department of Hygiene Fund.....	190,487 05	298 50
Laboratory of Hygiene Building Fund.....	15,001 75	
Thomas A. Scott Fellowship Fund	11,725 00	
Joseph M. Bennett Endowment Graduate De- partment	45,737 50	
A. S. Biddle Law Library Fund.....	20,250 00	
Simon Muhr Fund.....	9,490 60	81 25
George L. Harrison Foundation Fund.....	499,994 05	
George L. Harrison Cumulative Fund.....	144,100 00	
Library Dante and Tasso Fund.....	5,000 00	
Stille Memorial Library Fund.....	1,000 00	
John Stewardson Memorial Fund.....	18,055 28	91 30
John White Field Fund	10,000 00	
Pepper Hall Endowment.....	50,012 50	
Professors' Retiring Fund.....	6,776 25	
Clark Chair of Assyriology Fund.....	99,925 00	
Thomas S. Stewart Scholarship Fund.....	5,000 00	
Robert Morris Scholarship Fund.....	5,000 00	
James Logan Scholarship Fund.....	5,000 00	
Garrett Scholarship Fund.....	10,000 00	
Thomas H. Powers Scholarship Fund.....	5,000 00	
Hartman Kuhn Scholarship Fund.....	5,000 00	
Charles Brinton Coxé Scholarship Fund....	5,000 00	
Cadwalader Scholarship Fund.....	4,937 50	87 50
Rev. James Latta Scholarship Fund.....	5,000 00	
Louis Harrison Scholarship Fund.....	5,122 50	
Stephen Greene Scholarship Fund.....	5,100 00	
The Blanchard Fund.....	69,720 50	85 75
Suddards Fund	997 50	2 50
Albert Wilson Memorial Scholarship Fund..	2,592 00	5 95
Spencer Morris Prize Fund.....	9,925 00	
George Barnett Scholarship Fund.....	5,000 00	
J. B. Lippincott Veterinary Fund.....	98,003 50	
Eckley B. Coxé Scholarship Fund.....	5,000 00	
Erskine Hazard Dickson Memorial Fund....	25,000 00	
Bond Interest		756 52
Martha Austin McDowell Scholarship Fund.	4,950 00	50 00
Erskine Hazard Dickson Memorial Lib. Fund.	2,970 00	30 00

	Amount Invested.	Amount Uninvested.
John H. Converse Scholarship Fund....	\$4,906 20	\$93 80
Mask and Wig Club Fund.....	9,904 70	
Sommerville Collection Fund.....	19,293 20	55 96
University Fund for Women.....	100 00	
Frances C. Macauley Fund.....	4,875 00	125 00
Levinia Barnett Fairchild Scholarship Fund..	4,875 00	125 00
George Allen Memorial Endowment Fund...	1,000 00	
	<u>\$7,800,386 87</u>	<u>\$7,988 81</u>

	Amount Invested.	Amount Uninvested.
Hospital Endowments.		
General Fund.....	\$949,744 66	\$3,568 65
Hahn Ward.....	54,689 75	
Alumni Ward Fund.....	10,045 25	
Mrs. G. W. Norris Fund.....	10,000 00	
Bement Fund.....	5,000 00	
Ward Chronic Diseases Fund.....	300,848 91	553 65
Dr. Wm. Pepper Clinical Laboratory Fund..	25,030 00	
I. V. Williamson Hospital Fund.....	47,591 25	77 50
Children's Ward Fund.....	32 07	
Henry Seybert Fund.....	58,539 77	38 94
George S. Pepper Fund.....	74,872 83	5 62
Recto-Genito-Urinary Fund.....	4,100 39	
Anna M. Powers Bed Fund.....	6,000 00	
Mary W. Eakens Bed Fund.....	5,000 00	
Dr. D. Hayes Agnew Hospital Fund.....	171,645 57	
Dr. D. Hayes Agnew Bequest for Care of Sick Children.....	49,935 00	35 00
Dr. D. Hayes Agnew Bequest for Maternity Hospital	1,000 00	
Children's Medical Ward Fund.....	990 00	
Andrew C. Butler Fund.....	5,432 67	
Ligonier Fund.....	41,318 06	97 22
Children's Orthopedic Ward Fund.....	14,140 00	
Nurses' Home Fund.....	315 00	
A. Sydney Roberts Apparatus Fund.....	6,264 54	
John White Field Bed Fund.....	5,000 00	
Abby Willing Peters Bed Fund.....	5,000 00	
Maternity Fund.....	24,946 20	49 55
Edward Rhoads Memorial Fund.....	3,401 51	
Alfred Gustavus Baker Fund.....	5,000 00	
Abraham and Mary Baker Fund.....	5,100 00	
Mary B. K. Wainwright Fund.....	5,000 00	
Hamilton Diston Fund.....	3,000 00	
Percival Roberts Fund.....	3,000 00	
Thomas Harrison Fund.....	5,100 00	
Langstroth Fund.....	500 00	
Richard Heckscher Fund.....	5,031 25	
Woodward Fellowship Fund.....	21,012 50	53 74
Josephine S. Wentz Fund.....	5,000 00	
Thomas Elkinton Fund.....	4,600 00	67 41
George W. Vogel Fund.....	10,011 81	

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Hospital Endowments.	Amount Invested.	Amount Uninvested.
Diet Kitchen Fund	\$1,500 00	
Anna D. Scott Memorial Fund.....	15,000 00	
Emily M. Harrison Fund.....	4,981 88	\$18 12
Edward Roberts, Jr., Fund.....	5,000 00	
Mary Kay Fund.....	5,000 00	
Hiram Brooke Fund.....	4,987 50	12 50
Sinclair Tousey Fund.....	4,955 00	45 00
Sabin Woolworth Colton, 3d, Fund.....	3,000 00	
Maxwell Sommerville Bed Fund.....	10,000 00	8 00
Richard Horner Wyeth Bed Fund.....	5,000 00	
Marshall Spring Shapleigh and Wife Bed Fund	5,000 00	
Charles Eldridge Morgan and Wife Fund...	3,000 00	
Dr. George E. de Schweinitz Fund.....		5,000 00
	<u>\$2,020,692 87</u>	<u>\$9,631 50</u>

Building Funds.	Amount Invested.	Amount Uninvested.
Free Museum of Science and Art.....	\$409,295 38	\$327 00
Dormitories and Memorial Tower, Second Section	258,244 48	
Law School and Lot.....	582,024 18	
Randal Morgan Laboratory of Physics Equip- ment Fund.....	20,464 18	2,649 36
Randal Morgan Laboratory of Physics.....	153,970 20	1,763 15
Real Estate, No. 3316 Walnut Street.....	768 39	
New Medical Apparatus.....	20,221 65	
New Medical Laboratory.....	666,465 27	346 23
Dormitory, Fourth Section.....	62,426 64	32,821 87
Veterinary Building Fund.....		10 00
New Engineering Department Building.....	482,948 60	47,549 59
New Engineering Department Equipment...	65,566 47	
Premises Thirty-third and Locust Streets...	29,125 00	
Dormitory, Third Section.....	50,580 33	
		<u>\$84,967 20</u>
Sun Parlor.....	7,867 91	
Sun Parlor, Ward G.....	18,654 62	
Isolation Ward.....	25,862 47	
New Laundry.....	14,681 14	
X-Ray Plant.....	25,000 00	
Clyde Maternity Building.....	2,092 40	6,907 60
		<u>\$91,874 80</u>

Income Account.	Amount received, including Balance, August 31, 1906.	Amount Expended.	Balance.
General Fund.....	\$2,057 46	\$2,057 46	
J. Herman Raht Fund.....	12 50	12 50	
Phi Kappa Sigma Fund.....	20 00	20 00	
Keble Fund.....	538 02	538 02	
Elliott Cresson Fund.....	212 12	212 12	
Tobias Wagner Fund.....	265 00	265 00	
Bloomfield Moore Fund.....	952 03	952 03	
Thomas A. Scott Fund.....	2,471 36	2,471 36	
John H. Towne Fund.....	16,321 95	16,321 95	
John Welsh Fund.....	2,548 02	2,548 02	
A. Whitney Fund.....	2,671 89	2,671 89	
Scholarship Fund	240 16	240 16	
Benjamin Franklin Scholarship Fund	526 30	526 30	
Samuel V. Merrick Fund.....	140 40	140 40	
Matthew Baird Fund.....	300 66	300 66	
E. Otis Kendall Fund.....	100 00	100 00	
A. Seybert Fund.....	2,702 78	2,702 78	
Chair of Christian Ethics Fund	527 66	124 25	\$403 41
Alumni Hall Fund.....	325 60	325 60	
H. Tyndale Fellowship Fund.	606 85	606 85	
S. W. Roberts Fund.....	49 48	49 48	
Wharton School Fund.....	30,436 49	14,210 06	16,226 43
Assyrian Fellowship Fund....	9 48	9 48	
Pepper Professorship Hygiene Fund	2,946 52	2,946 52	
J. Rhea Barton Fund.....	1,958 82	1,958 82	
J. Gillingham Fell Fund....	49 88	49 88	
Auxiliary Faculty of Medicine Fund	1,638 56	1,638 56	
Leidy Chair of Anatomy Fund.	109 00	109 00	
Botanical Garden Fund.....	208 62	208 62	
Department of Biology Fund.	12 52	12 52	
I. V. Williamson Fund.....	2,252 44	2,252 44	
George S. Pepper Residuary Legatee Fund	1,716 56	1,716 56	
Frances S. Pepper Scholarship Fund	332 84	332 84	
Chair of Pedagogy Fund....	11 88	11 88	
Course in Social Work Fund.	210 00	210 00	
Henry Reed Prize Fund.....	137 39	24 00	113 39
Latin Prize Fund	181 97	65 00	116 97
Oratory Prize Fund.....	68 91		68 91
English Composition Prize Fund	36 33	8 00	28 33
Arthur Spayd Brooke Mem- orial Prize Fund.....	83 30	47 50	35 80
J. Warner Yardley Prize Fund	148 68		148 68
Class 1880 Prize Fund.....	350 17		350 17
Allen Memorial Prize Fund.	61 16	20 00	41 16
P. Pemberton Morris Prize Fund	40 14	40 00	14

Treasurer's Report.

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Income Account.	Amount received, including Balance, August 31, 1905.	Amount Expended.	Balance.
Joseph M. Bennett Bequest Fund	\$27,330 84	\$27,330 84	
Rev. C. P. Krauth Library Fund	100 32	65 30	\$35 02
Agricultural Library Fund...	107 58	16 59	90 99
Pepper Memorial Lib. Fund.	590 62	477 64	112 98
Tobias Wagner Lib. Fund...	717 08	332 86	384 22
J. B. Lippincott Lib. Fund..	427 64	417 72	9 92
Isaac Norris Library Fund..	492 14	63 71	428 43
Reese Wall Flower Fund....	5,712 51	5,712 51	
Veterinary Fund.....	963 94	963 94	
Houston Hall Endowment Fund	23 74	23 74	
Wistar and Horner Museum Fund	5 50	5 50	
Department of Law Fund....	386 76	386 76	
John F. Fraser Fellowship Fund	441 06	441 06	
Department of Hygiene Fund	5,679 32	5,679 32	
Thomas A. Scott Fellowship Fund	380 98	380 98	
Joseph M. Bennett Graduate Department Fund.....	3,235 50	3,235 50	
A. S. Biddle Law Lib. Fund..	998 30	998 30	
Simon Muhr Scholarship Fund	391 28	391 28	
George L. Harrison Foundation Fund	20,845 26	20,845 26	
Stille Memorial Lib. Fund..	108 46	108 46	
John Stewardson Memorial Fund	1,480 31	1,131 44	348 87
John White Field Fund....	536 39	536 39	
Pepper Hall Endowment Fund	2,723 00	2,198 00	525 00
University Fund for Women.	24 00		24 00
Professors' Retiring Fund...	1,470 30		1,470 30
Clark Chair of Assyriology Fund	4,375 90	4,375 90	
Thomas S. Stewart Scholarship fund	200 00	200 00	
Robert Morris Scholarship fund	250 00	250 00	
James Logan Scholarship fund	250 00	250 00	
Garrett Scholarship fund....	467 08	467 08	
Thomas H. Powers Scholarship fund	236 76	236 76	
Hartman Kuhn Scholarship fund	250 00	250 00	
Charles Brinton Cox fund..	200 00	200 00	
Cadwalader Scholarship fund.	195 00	195 00	
Powers Professors' Salary fund	20 00	20 00	
Rev. James Latta Scholarship fund	200 00	200 00	

Income Account.	Amount received, including Balance, August 31, 1906.	Amount Expended.	Balance.
Louise Harrison Scholarship fund	\$240 00	\$240 00	
Stephen Greene Scholarship fund	200 00	200 00	
Blanchard fund	2,525 00	2,525 00	
Suddards fund	40 00		\$40 00
Albert Wilson Memorial Scholarship fund	114 00	114 00	
Spencer Morris Prize fund...	754 25	375 00	379 25
George Barnett Scholarship fund	200 00	200 00	
J. B. Lippincott Veterinary fund	3,907 00	3,907 00	
Eckley B. Coxe Scholarship fund	225 00	225 00	
Erskine Hazard Dickson Me- morial fund	1,110 00	1,110 00	
Randal Morgan Laboratory of Physics fund	2,360 00	2,360 00	
Increase Salaries fund.....	1,000 00	1,000 00	
New Dormitory Second Sec- tion fund	400 00	400 00	
Dormitory Third Section fund	23 76	23 76	
Real Estate No. 3316 Walnut Street fund	256 50	193 65	62 85
New Engineering Department	80 10	80 10	
New Medical Laboratory....	335 11	335 11	
Dormitory Fourth Section...	562 50	562 50	
Martha A. McDowell Scholar- ship fund	225 00	225 00	
Erskine Hazard Dickson Me- morial Library fund.....	92 40	76 20	16 20
John H. Converse Scholarship fund	175 00	175 00	
Mask and Wig Club fund....	317 50	317 50	
Temporary Investment Ac- count	300 00	300 00	
Department of Archaeology and Paleontology fund...	693 80	693 80	
Sommerville Collection fund.	963 19	963 19	
	<u>\$184,509 57</u>	<u>\$163,048 15</u>	<u>\$21,461 42</u>
Less Bal. Aug. 31, 1905..	13,764 68		
Net Income	<u>\$170,744 89</u>		

FUNDS NOT FOR INVESTMENT.

Income Account.	Amount received, including Balance, August 31, 1908.	Amount Expended.	Balance.
Botanical Garden fund.....	\$1,501 68	\$1,501 68	
John C. Roper Prize fund....	4 95		\$4 95
Eugene Delano Prize fund....	50 00	50 00	
"J. S. H." Prize fund.....	275 00	275 00	
Course in Social Work.....	400 00	43 97	356 03
William H. Mulford Prize Fund	25 00	25 00	
Library Architecture	300 00	55 70	244 30
Library Special Appropriation No. 11	2,000 00	1,478 65	521 35
Library Botany	121 56	40 11	81 45
Library Church History.....	120 00	88 05	31 95
E. Burgess Warren Library Fund	5 01	4 50	51
Library Municipal Govern- ment	175 00	124 73	50 27
Library History	500 00	458 81	41 19
Library Periodicals	3,440 67	2,850 43	590 24
German Traveling Scholarship Fund	300 00	300 00	
Library Music	261 07	17 28	243 79
A. S. Biddle Law Library Fund	500 00	500 00	
Alumni Fund Biddle Library.	161 72	161 72	
University View Fund.....	1,377 00	583 93	793 07
Library Dante	52 23	18 75	33 48
Library Old English Plays...	200 80	160 55	40 25
Library Insurance	68		68
Chemical Laboratory Apparat- us Fund	2,232 94	63 70	2,169 24
College Apparatus Fund....	20 05		20 05
Medical Bulletin Fund.....	1,500 00	1,500 00	
Contributions Veterinary De- partment Fund	1,500 00	1,500 00	
American School at Athens Fund	2,660 00	2,660 00	
College Settlement Fund....	200 00	200 00	
Naples Table Fund.....	50 00	50 00	
James Truman House Dormi- tory Fund	122 49		122 49
Contributions Current Ex- pense University Fund...	15,534 30	14,534 30	1000 00
Mrs. E. W. Harrison Fund for Collection of Casts.....	26 27		26 27
Architecture Lecture Course Fund	9 92		9 92
Architecture General Fund...	171 52	100 00	71 52
Architecture Peabody Fund..	12 42	12 42	
Architecture Equipment Fund	343 93		343 93
Law Lecture Course Fund....	1,625 00	1,500 00	125 00

Income Account.	Amount received, including Balance, August 31, 1906.	Amount Expended.	Balance.
Eckley B. Coxe, Jr., Fund...	\$5,917 77	\$2,995 36	\$2,952 41
Epiadidascope Fund	100 00		100 00
Needy Students Aid Fund....	4,916 30	3,916 30	1,000 00
University Publication Fund.	3,187 76	2,190 91	996 85
Increase of Salaries Fund....	18,250 00	18,250 00	
Contributions Salary Adminis- tration Library Fund....	650 00	650 00	
Alliance Francaise Fellowship Fund	300 00	300 00	
Geography Special Fund....	74 60	17 34	57 26
Gymnasium Deficiency Fund.	1,475 00	1,475 00	
Surgical Research Fund....	656 36	656 36	
Interest Account	2,326 61	2,326 61	
Frazer Debate Prize Fund...	100 00	100 00	
Campus Fund	3,775 35	2,423 88	1,351 47
Law Library Fund.....	5,617 95	5,367 95	250 00
Sundry Friends of the Uni- versity Fund	30,000 00	30,000 00	
Architecture Salary Fund....	1,030 00	1,030 00	
Architecture Fellowship Fund	1,000 00	988 38	11 62
Houston Hall Library Fund..	710 09	700 00	10 09
Surface Fellowship Fund....	300 00		300 00
Contributions Current Expense Library Fund	969 65	727 16	242 49
Law School Monograph Fund	384 00	223 17	160 83
Veterinary Insurance Fund..	6,235 87	3,013 32	3,222 55
Contributions Current Expense Law Fund	250 00		250 00
Henszey Architecture Fund..	4,700 00	1,709 21	2,990 79
Wharton Hall Improvement Fund	500 00		500 00
	<u>\$131,238 52</u>	<u>\$109,920 23</u>	<u>\$21,318 29</u>
Less Temporary Loans...			10,189 38
			<u>\$11,128 91</u>

UNIVERSITY TRUST ACCOUNT.

BALANCE SHEET.

Dr.		
Balance August 31st, 1905.....		\$128,240 31
To Donations for Investment \$112,435 00		
" Donations not for Investment	297,251 66	
	<hr/>	\$409,686 66
" Investments sold or paid off.....	45,572 34	
" Premiums returned	170 00	
" Income from Trusts received.....	170,744 89	
" Insurance Premiums returned.....	2,369 60	
" Amounts received from Departments for Sinking Fund and Bond Interest.....	9,595 54	
" Tuition Fees transferred to Law Library Fund	5,267 53	
" Advances to Trusts by Administration...	11,561 84	
" Loan to Department Physical Education repaid	3,500 00	
" Interest on Bank Balances.....	2,326 61	
" Sales of Material.....	367 02	
	<hr/>	661,162 03
		<hr/>
		\$789,402 34
Cr.		
By Investments made	\$223,601 30	
" Premiums and Accrued Interest paid....	2,519 49	
" Income transferred to Administration...	113,488 10	
" Funds transferred to Administration...	59,288 06	
" Paid on account Building, Grounds and Equipment	190,827 55	
" Payments account Veterinary Building Insurance Fund	3,013 32	
" Sundry Cash payments account Trusts...	26,317 61	
" Taxes, Insurance, Water Rent, Repairs and Legal Expenses.....	6,310 35	
" Sinking Fund Bonds paid.....	10,000 00	
" Advances by Administration repaid.....	28,490 22	
	<hr/>	663,856 00
		<hr/>
Balance August 31st, 1906.....		<u>\$125,546 34</u>

ADMINISTRATION.

GENERAL BALANCE SHEET.

Dr.	
To Balance August 31st, 1905.....	\$71,602 15
" Bursar's Cash	600 00
	<hr/>
" Tuition Fees	\$418,490 86
" Gymnasium Fees	18,523 63
" Houston Club Fees.....	7,534 75
" Students' Deposits Received.....	21,128 29
" Am'ts Received from Various Departments	
Veterinary Hospital	9,728 46
Central Light and Heat Station.....	66,333 32
Dormitories	60,157 27
Department of Repairs.....	6,920 67
" Income from Trusts	112,988 10
" Funds not for Investment.....	59,788 06
" Insurance account Logan Hall.....	20,011 00
" Insurance account Central Light and Heat	
Station	34,095 72
" Advances to Trusts returned.....	86,413 21
" Sales of Old Material.....	991 96
" Interest on Bank Balances.....	2,921 66
	<hr/>
	926,016 96
	<hr/>
	\$998,219 11
Cr.	
By Educational Salaries	\$399,645 72
" Administration Salaries	111,759 11
" Current Expense Account.....	230,861 18
" Prize Money Paid	757 99
" Students' Deposits Returned.....	19,237 97
" Payments to Treasurer Houston Club....	7,575 51
" Payments account Fellowships.....	1,184 19
" Insurance Paid account Logan Hall.....	19,355 24
" Insurance Paid account Central Light and	
Heat Station	3,064 75
" Transfer to Trusts Law Library.....	5,267 53
" Advances to Trusts.....	81,561 84
	<hr/>
	880,270 98
	<hr/>
Balance August 31st, 1906.....	\$117,348 13
Bursar's Cash	600 00
	<hr/>
	\$117,948 13
	<hr/> <hr/>

ANALYSIS OF ADMINISTRATION ACCOUNTS.

		Surplus.	Deficit.
College:			
Current Expense Account...	\$55,926 34		
Salaries, Education.....	188,526 45		
Salaries, Administration....	11,684 69		
	<u>\$256,137 48</u>		
Tuition Fees	\$165,204 68		
Income	60,254 17		
	<u>225,458 85</u>		
			\$30,678 63
Wharton School:			
Current Expense Account...	\$11,084 79		
Salaries, Education.....	33,837 81		
Salaries, Administration....	2,223 49		
	<u>\$47,246 09</u>		
Tuition Fees	\$33,574 92		
Income	13,671 17		
	<u>47,246 09</u>		
Department of Medicine:			
Current Expense Account...	\$41,213 58		
Salaries, Education.....	74,492 86		
Salaries, Administration....	15,548 90		
	<u>\$131,255 34</u>		
Tuition Fees	\$104,612 15		
Income	2,117 70		
	<u>106,729 85</u>		
			24,525 49
Department of Law:			
Current Expense Account...	\$11,703 20		
Salaries, Education.....	29,999 82		
Salaries, Administration....	6,616 36		
Transfer to Law Library....	5,267 53		
	<u>\$53,586 41</u>		
Tuition Fees	\$43,936 45		
Income	1,885 06		
	<u>45,821 51</u>		
			7,764 90
Department of Dentistry:			
Current Expense Account...	\$7,589 72		
Salaries, Education.....	29,059 98		
Salaries, Administration....	3,949 53		
	<u>\$40,599 23</u>		
Tuition Fees	42,096 20		
	<u>\$2,396 97</u>		

		Surplus.	Deficit.
Laboratory of Hygiene:			
Current Expense Account...	\$3,443 95		
Salaries, Education.....	3,466 86		
Salaries, Administration....	540 00		
	<u>\$7,450 81</u>		
Tuition Fees	\$4 35		
Income	8,848 69		
	<u>8,853 04</u>		
			\$1,402 23
George L. Harrison Foundation:			
Salaries, Education.....	\$15,509 17		
Income	15,509 17		
	<u></u>		
Veterinary Department (Medicine):			
Current Expense Account...	\$3,878 64		
Salaries, Education.....	5,025 00		
Salaries, Administration....	1,821 67		
	<u>\$10,725 31</u>		
Tuition Fees	\$9,212 65		
Income.....	4,149 75		
	<u>13,362 40</u>		
			2,637 09
Department of Veterinary Hospital:			
Current Expense Account...	\$6,576 20		
Salary, Administration.....	5,964 86		
	<u>\$12,541 06</u>		
Receipts	\$9,728 46		
Income	443 94		
	<u>10,172 40</u>		
			\$2,368 66
Central Light and Heat Station:			
Current Expense Account...	\$49,935 62		
Salary, Administration.....	16,788 00		
	<u>\$66,723 62</u>		
Receipts	66,333 32		
	<u></u>		
			390 30

SUMMARY.

DEFICITS :			
College	\$30,678 63		
Department of Medicine....	24,525 49		
Department of Law.....	7,764 90		
Department of Veterinary Hospital	2,368 66		
Central Light and Heat Sta- tion	390 30		
SURPLUS :			
Department of Dentistry....	\$2,396 97		
Department of Hygiene....	1,402 23		
Department of Veterinary Medicine	2,637 09		
Net Deficit	59,291 69		
	<u>\$65,727 98</u>	<u>\$65,727 98</u>	

HOSPITAL.

GENERAL BALANCE SHEET.

Balance August 31st, 1906.....		\$39,403 04
RECEIPTS:		
From Investments sold or paid off.....	\$21,652 30	
“ Premiums received	20 00	
“ Donations for Investment.....	86,323 43	
“ Donations not for Investment.....	98,821 45	
“ Income from Invested Funds.....	53,653 19	
“ Interest on Bank Balances.....	262 07	
		<hr/>
		210,732 44
Total receipts		<hr/>
		\$250,135 48
EXPENDITURES:		
Paid to Superintendent.....	\$124,596 87	
Investments made	73,446 00	
Accrued Interest paid.....	181 81	
Premiums paid	446 90	
Taxes, Repairs and Legal Expenses.....	290 85	
Paid on account Woodward Fellowship.....	890 58	
Paid on account Mrs. Edward Browning, Treasurer	60 00	
Paid on account Maintenance Pepper Laboratory	4,265 44	
Paid on account Sun Parlor.....	18,654 62	
Paid on account Isolation Ward.....	4,086 06	
Paid on account New Laundry.....	299 10	
Paid on account Clyde Maternity.....	2,092 40	
		<hr/>
		229,260 63
Balance August 31st, 1906.....		<hr/>
		\$20,874 85
Balance made of		
Special Funds.....	\$11,243 85	
Funds for Investment...	9,631 50	
		<hr/>
	\$20,874 85	<hr/>

HOSPITAL TRUST ACCOUNT.

Income Received From Trusts From August 31st, 1905, to August 31st, 1906.

General Fund	\$18,306 24
Hahn Ward Fund	2,991 73
Alumni Ward Fund	472 16
Mrs. George W. Norris Fund.....	713 26
Bement Fund	225 00
Ward Chronic Diseases.....	10,700 01
Dr. William Pepper Clinical Laboratory Fund	8 60
I. V. Williamson Hospital Fund.....	2,377 82
Children's Ward Fund.....	1 68
Henry Seybert Fund.....	2,420 57
George S. Pepper Fund.....	2,999 85
Recto-Genito-Urinary Fund	185 53
Anna M. Powers Bed Fund.....	360 00
Mary W. Eskens Bed Fund.....	250 00
Dr. D. Hayes Agnew Hospital Fund.....	283 41
Dr. Agnew Bequest for care of sick children	1,322 84
Dr. Agnew Bequest for Maternity Hospital..	50 00
Children's Medical Ward.....	40 00
Andrew C. Butler Fund.....	241 08
Ligonier Fund	1,641 23
Children's Orthopaedic Ward.....	700 00
A. Sydney Roberts Apparatus Fund.....	310 94
John White Field Fund.....	248 21
Abby Willing Peters Fund.....	248 15
Maternity Fund	1,088 46
Edward Rhoades Memorial Fund.....	166 42
Alfred Gustavus Baker Fund.....	250 88
Abraham and Mary Baker Fund.....	225 00
Mary B. K. Wainwright Fund.....	374 00
Hamilton Diaston Fund.....	120 00
Percival Roberts Fund.....	120 00
Thomas Harrison Fund.....	200 00
Langstroth Fund	30 00
Richard Hecksher Fund.....	200 00
Woodward Fellowship	897 41
Josephine S. Wentz Fund.....	202 98
Thomas Elkinton Fund.....	221 25
George W. Vogel Fund.....	454 00
Diet Kitchen Fund.....	60 00
Emily M. Harrison Fund.....	200 52
Edward Roberts, Jr., Fund.....	200 00
Mary Kay Fund.....	200 00
Hiram Brooke Fund.....	225 00
Sinclair Tousey Fund.....	200 00
Sabin Woolworth Colton, 3d, Fund.....	150 00
Maxwell Sommerville Fund.....	400 00
Richard Horner Wyeth Fund.....	100 00
Marshall Spring Shapleigh and Wife Fund...	125 00
Charles Eldridge Morgan and Wife Fund....	150 00

\$53,653 19

HOSPITAL ACCOUNT.

BED FUNDS.

A. M. Powers Bed Fund:		
Harris, Mrs. Mary Powers		\$300 00
Moulton H. Forrest Memorial Bed Fund:		
Forrest, Mrs. Emma L.		600 00
Charles Eldridge Morgan and Wife Bed Fund:		
Morgan, Randal		3,000 00
Marshall Spring Shapleigh and Wife Bed Fund:		
Morgan, Randal		5,000 00
Richard Horner Wyeth Bed Fund:		
Wyeth, Mrs. F. H.		5,000 00
Children's Medical Ward:		
Austin, Mr. and Mrs. James S.	\$200 00	
Committee on Children's Ward.	200 00	
Crozer, Mrs. George K.	200 00	
Griffith, Mrs. B.	200 00	
		<hr/>
		800 00
Children's Orthopaedic Ward:		
Austin, Mr. and Mrs. James S.	\$200 00	
Collins, Mrs. H. H.	200 00	
Conrad, Mrs. Thomas K.	200 00	
Dickson, Mrs. Samuel.	200 00	
Freedley, Mrs. William G.	400 00	
"Friends of Gymnasium"	200 00	
Hiestor, Mrs. Isaac.	200 00	
League Bed No. 1.	200 00	
League Bed No. 2.	200 00	
Page, Mrs. Joseph F., Jr.	200 00	
Porter, Hon. and Mrs. W. W.	200 00	
Reed, Mrs. Thomas S.	200 00	
Saturday Club of N. J.	200 00	
Townsend, Mrs. John W.	200 00	
		<hr/>
		3,000 00
Clyde Maternity Building Fund:		
Clyde, Mrs. Benjamin F.		9,000 00
General Fund:		
Charity Ball Committee	\$2,350 00	
City of Philadelphia.	375 00	
Kay, Estate of J. Alfred, deceased.	1,858 86	
State of Pennsylvania.	70,000 00	
Taylor, Estate of Diana, deceased.	565 83	
Welsh, Mrs. J. Lowber.	800 00	
		<hr/>
		75,449 09

Isolation Ward:

State of Pennsylvania.....	\$3,223 59
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Maintenance Pepper Clinical Laboratory,

through Dr. Alfred Stengel.....	3,500 00
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Dr. George E. de Schweinitz Fund:

de Schweinitz, Dr. George E.	5,000 00
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Sun Parlor, Ward G:

Burnham, Williams & Co.	\$500 00
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De Silver, Robert P.	2,014 00
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McFadden, George H.	500 00
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McFadden, John H.	500 00
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 3,514 00
Ward Chronic Diseases Fund:

Johnson, Estate of Mary M., deceased..	17,757 60
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CONTRIBUTIONS TO THE UNIVERSITY.

August 31st, 1905, to August 31st, 1906.

ARCHITECTURE SALARY FUND.

Anonymous	\$100 00
Baum, George C.....	20 00
Bissell, E. P.....	10 00
Blair, Walter D.....	30 00
Bodine, F. L.....	10 00
Brockie, A. H.....	10 00
Clarke, J. O.....	10 00
Davis, Miss Martha.....	10 00
De Gelleke, Peter, Jr.....	20 00
Dentz, John G.....	10 00
Dick, G. A.....	10 00
Edmunds, F. D.....	10 00
Fairbrother, F. A.....	20 00
Fisher, C. S.....	10 00
Frank, J. Horace.....	10 00
Githens, A. M.....	10 00
Grant, Charles C.....	10 00
Hays, William Charles.....	10 00
Heacock, J. L.....	10 00
Hill, Walter M.....	10 00
Hokanson, O. M.....	10 00
Johnson, V. L.....	10 00
Jory, H. G.....	10 00
Kast, M. L.....	10 00
Kintzing, Lester.....	10 00
Kraber, George R.....	10 00
Kropff, H. M.....	10 00
Kuenzli, E. O.....	10 00
Leisenring, L. M.....	10 00
Magaziner, Louis.....	10 00
Medary, M. B.....	\$10 00
Mills, C. S.....	10 00
Neff, Conrad F.....	10 00
Oakley, T.....	10 00
Perot, R. L.....	10 00
Rommel, F. A.....	10 00
Rawson, L. A.....	10 00
Scull, Wm. Ellis.....	200 00
Shrigley, A.....	10 00
Sinkler, J. P. B.....	10 00
Smith, Edw. B.....	200 00
Smith, Livingston.....	10 00
Spaulding, W. H.....	10 00
Stuart, P. C.....	10 00
Taylor, Herbert G.....	10 00
Trumbauer, W.....	10 00
Williams, A. E.....	10 00
Willing, J. E.....	10 00

Wright, Henry	\$10 00	
Zantsinger, C. C.	10 00	
Ziegler, C. A.	10 00	
	<hr/>	\$1,030 00

ARCHITECTURE EQUIPMENT.

Bodine, Samuel T.		\$100 00
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AMERICAN SCHOOL AT ATHENS.

Brock, Robert C. H.	\$2,000 00	
Through Robert C. H. Brock.	660 00	
	<hr/>	\$2,660 00

DEPARTMENT ARCHAEOLOGY AND PALEONTOLOGY.

Clark, E. W., & Co.		\$1,000 00
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GEORGE ALLEN MEMORIAL ENDOWMENT.

Rosengarten, Joseph G.		\$1,000 00
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BLANCHARD FUND.

The Misses Blanchard.		\$15,000 00
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BOTANICAL GARDEN FUND.

Botanical Society of Pennsylvania.	\$1,251 68	
Dreer, William F.	250 00	
Morwitz, Joseph.	100 00	
	<hr/>	\$1,601 68

CAMPUS FUND—THROUGH MRS. CHAS. C. HARRISON.

Biddle, Miss Marianne.	\$10 00	
Brock, Mrs. R. C. H.	25 00	
Brooke, Mrs. Geo.	10 00	
Browning, Mrs. Edw.	5 00	
Clark, Miss Frances.	10 00	
Coles, Mrs. Jno. W.	5 00	
Coxe, Mrs. Alex. B.	25 00	
Dolan, Thomas.	1,000 00	
Hacker, Mrs. Chas.	10 00	
Harrison, Mrs. Chas. C.	17 88	
Harrison, Mrs. Chas. C., Jr.	281 00	
Heckscher, Mrs. Richard.	5 00	
Harris, Mrs. Mary Powers.	50 00	
Hinchman, Miss L. S.	10 00	
Hutchinson, Miss Margaretta.	15 00	
Lesley, R. W.	20 00	
McKean, Mrs. Thomas.	100 00	
Markoe, Mrs. John.	10 00	
Paul, Miss Mary W.	50 00	
Paul, James W., Jr.	25 00	
Porter, Mrs. Augusta H.	5 00	
Roberts, Miss E. C.	10 00	
de Schweinitz, Dr. Geo. E.	25 00	
Smith, Mrs. Jacqueline H.	5 00	
Spencer, Mrs. J. T.	10 00	

Treasurer's Report.

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Stevenson, Mrs. F. C.	\$5 00	
Valentine, Jno. R.	50 00	
Wheeler, Mrs. Chas.	5 00	
Winpenny, Mrs. Susan G. S.	10 00	
	<hr/>	\$1,808 88

CHEMICAL APPARATUS FUND.

Harrison, Thomas S.	\$250 00	
Rosengarten, H. B. & J. G.	438 11	
	<hr/>	\$688 11

COLLEGE SETTLEMENT FUND.

Lewis, Lawrence.		\$200 00
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COURSE IN SOCIAL WORK.

Bodine, S. T.	\$100 00	
Burnham, Miss Mary A.	50 00	
Fels, Samuel S.	100 00	
Powers, Thomas Harris.	50 00	
Rosengarten, Joseph G.	50 00	
Woodward, Dr. Geo.	50 00	
	<hr/>	\$400 00

ECKLEY B. COXE, JR., FUND.

Coxe, Eckley B., Jr.		\$3,000 00
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DORMITORY—FOURTH SECTION.

Benson, Geo. S., Jr.	\$100 00	
Brill, J. G., Co.	1,000 00	
Davis, Jno. C. S.	250 00	
Greene, Stephen.	5,000 00	
Lippincott, J. Dundas (Lippincott House)..	7,500 00	
Merrick, J. Vaughan.	500 00	
Paul, Miss Mary W. and Dr. James.	300 00	
Roberts, Miss E. C.	500 00	
Roberts, Miss F. A.	500 00	
Smith, A. Lewis.	250 00	
Townsend, J. Barton.	1,000 00	
	<hr/>	\$16,900 00

TRUMAN HOUSE DORMITORY.

Hagenschmitt, A. C.	\$20 00	
Secretary of Alumni, Australia.	52 49	
	<hr/>	\$72 49

FELLOWSHIP ALLIANCE FRANCAISE.

Rosengarten, Jos. G.		\$300 00
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FELLOWSHIP IN ARCHITECTURE.

Henszey, Wm. P.		\$11,000 00
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FELLOWSHIP—SURFACE.

Brooks, James C.		\$300 00
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LECTURE FUND.

Paul, J. Rodman, Treasurer.....	\$1,500 00
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GENERAL FUND.

Anonymous (through Walter George Smith).....	\$100 00
Converse, John H.....	1,000 00
Church, Arthur L.....	100 00
Dickson, Samuel.....	57 10
Dolan, Thomas.....	1,000 00
Downs, Norton.....	50 00
Frazier, Geo. H.....	207 10
Garrett, Mrs. Walter.....	500 00
Gest, John B.....	100 00
Harrison, C. C.....	157 10
Harris, Jos. S.....	100 00
Hoffman, Benj. R.....	75 00
Johnson, Alba B.....	1,000 00
Jones, J. Levering.....	1,157 10
Langsdorf, Isador.....	200 00
Le Conte, Dr. R. G.....	50 00
Lippincott, J. Bertram.....	157 10
Magee, Miss Eliza J.....	250 00
Magee, Miss Fannie S.....	250 00
Morgan, Randal.....	157 10
Merrick, Est. of J. Vaughan, Deceased.....	1,000 00
Powers, Thomas H.....	7,000 00
Rosengarten, Jos. G.....	207 10
Several Friends of the University.....	30,000 00
Sinkler, Dr Wharton.....	57 10
State of Pennsylvania.....	1,000 00
Townsend, J. B., Jr.....	107 10
Smith, Walter George.....	107 10
Troy, Richard H.....	5 00
Willson, Dr. Robert N.....	183 30
	<hr/>
	\$46,334 30

HENSZEY ARCHITECTURE FUND.

Henszey, William P.....	\$5,000 00
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INCREASE OF COLLEGE SALARIES.

Clapp, B. Frank.....	\$100 00
Coxe, Eckley B., Jr.....	50,000 00
Coxe, Miss Rebecca.....	1,000 00
Gest, John B.....	250 00
Gibson, Miss Mary K.....	5,000 00
Lea, Henry C.....	5,000 00
McCahan, W. J.....	1,000 00
A Friend of the University, through W. G. Smith.....	200 00
Presser, Theodore.....	200 00
Powers, Mrs. Mary.....	2,000 00
Powers, Thomas H.....	1,000 00
Rosengarten, Jos. G.....	1,000 00
Rosengarten, Miss Fanny.....	500 00
Vaclair, S. M.....	1,000 00
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	\$68,250 00

Treasurer's Report.

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LAW DEPARTMENT CURRENT EXPENSE.

Lewis, Henry.....	\$250 00
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LAW SCHOOL MONOGRAPH FUND.

Through Dr. William Draper Lewis.....	\$86 45
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ALUMNI FUND—BIDDLE LIBRARY.

Alumni Law Department.....	\$500 00
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LIBRARY—CHURCH HISTORY.

Castner, Samuel, Jr.....	\$10 00
Cheyney, E. P.....	10 00
Fleck, L. F.....	10 00
Harrity, William F.....	10 00
Hirst, A. A.....	10 00
Maloney, Martin.....	10 00
Morris, Geo. W.....	10 00
Sinnott, Mrs. Jos. F.....	10 00
Smith, Walter George.....	10 00
Sullivan & Bro.....	20 00
Wilcox, James M.....	10 00
	<hr/>
	\$120 00

LIBRARY—CURRENT EXPENSE.

Alumni Society.....	\$50 00
Anonymous	100 00
Prevost, S. Mallet.....	250 00
Rosengarten, Jos. G.....	414 20
	<hr/>
	\$814 20

LIBRARY—DANTE.

Macauley, Estate Francis C., Deceased.....	\$5,000 00
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LIBRARY—HAZARD DICKSON MEMORIAL.

Dickson, Mrs. Samuel.....	\$1,000 00
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LIBRARY—HISTORY.

Jones, J. Levering.....	\$250 00
Rosengarten, Jos. G.....	250 00
	<hr/>
	\$500 00

LIBRARY—MUNICIPAL GOVERNMENT.

Burnham, George, Jr.....	\$100 00
Jones, J. Levering.....	25 00
Burnham, Williams & Co.....	50 00
	<hr/>
	\$175 00

LIBRARY—MUSIC.

Alumni Society Department Music.....	\$12 00
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LIBRARY—LAW.

Strauss, Oscar.....	\$250 00
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LIBRARY—OLD ENGLISH PLAYS.

Furness, H. H.	\$10 25	
Rosengarten, Jos. G.	10 25	
	<hr/>	\$20 50

LIBRARY—PERIODICALS.

Harrison, C. C.	\$1,000 00	
Rosengarten, Jos. G.	1,000 00	
	<hr/>	\$2,000 00

LIBRARY—SALARIES ADMINISTRATION.

Frazier, Wm. W.	\$30 00	
Rosengarten, Jos. G.	620 00	
	<hr/>	\$650 00

LIBRARY—SPECIAL APPROPRIATION No. 11.

Harris, Jos. S.		\$1,000 00
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MASK AND WIG CLUB FUND.

Mask and Wig Club.		\$5,000 00
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FRANCIS C. MACAULEY FUND.

Macauley, Estate Francis C., Deceased.		\$5,000 00
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MEDICAL BULLETIN.

Frazier, Geo. H.		\$1,500 00
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RANDAL MORGAN LABORATORY OF PHYSICS.

A Friend to Science.		\$25,000 00
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NAPLES TABLE.

Hitchcock, Miss F. R. M.		\$50 00
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NEEDY STUDENTS' AID FUND.

Bonnell, George B.	\$300 00	
Brooks, James C.	200 00	
Brown, Wm. Alexander.	50 00	
Collins, Henry H.	1,000 00	
Converse, John H.	150 00	
Curtis Publishing Co.	1,000 00	
Harrison, Mrs. Letitia H.	200 00	
Lewis, Lawrence.	300 00	
McElroy, Clayton, Treasurer '92.	150 00	
Rosengarten, Joseph G.	216 30	
Rudolph, H. H.	100 00	
Wunderle, Ph.	200 00	
	<hr/>	\$3,866 30

Treasurer's Report.

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NEW ENGINEERING DEPARTMENT.

Allen, Wm. F.....	\$100 00
Barney & Co., Chas. D.....	1,000 00
Bancroft, Wm. P.....	500 00
Bell, Samuel, Jr.....	125 00
Berwind, H. A.....	2,500 00
Blabon, Edwin L.....	250 00
Bonsack, J. A.....	500 00
Brice, Ephraim.....	250 00
Bromley, Edward.....	1,000 00
Bromley, John H.....	1,000 00
Bromley, Jos. H.....	2,500 00
Burnham, Williams & Co.....	25,000 00
Catherwood, J. H.....	500 00
Chandler Bros. & Co.....	250 00
Clarke, C. M.....	500 00
Clark, E. Walter.....	1,000 00
Colton, S. W., Jr.....	3,000 00
Devlin, Thomas, Mfg. Co.....	1,000 00
England, Thomas Y.....	1,000 00
Fleisher, Simon B.....	250 00
Folwell, N. T.....	250 00
Frazier, W. W., Jr.....	500 00
Gowen, Francis I.....	1,000 00
Gradfelder, S.....	200 00
Grant, Wm. S.....	1,000 00
Graves, N. Z.....	500 00
Gribbel, John.....	500 00
Grundy, Wm. H., & Co.....	250 00
Guggenheim, Wm.....	12,500 00
Hagedorn, Jos. H.....	25 00
Hale, Henry S.....	125 00
Harrison, Alfred C.....	1,000 00
Harrison, W. W.....	1,000 00
Helme, Wm. E.....	250 00
Hendrickson, S. A.....	500 00
Hering, Walter E.....	200 00
Hipple, Frank K.....	250 00
Hughes, R. J.....	100 00
Hunter, T. Comly.....	1,000 00
Jeanes, Isaac W.....	500 00
Jones, J. Levering.....	1,000 00
Ketterlinus, J. L.....	500 00
Kohn, Simon I. & Samuel.....	500 00
Kremer & Strubing.....	500 00
Latta, Thomas L.....	250 00
Lit Bros.....	500 00
Magee, Horace.....	250 00
Mann, Chas. H.....	250 00
Masland, C. H., & Son.....	100 00
Matthieu, J. P.....	1,000 00

McCahan, Wm. J.	\$2,000 00
McIlhenny, John.....	500 00
McOwen, Frederick.....	1,000 00
McCullough, Edmond H.....	100 00
McFadden, J. Frank.....	250 00
Merrick, J. Vaughan.....	230 08
Merrick, Estate J. Vaughan, Deceased.....	269 82
Merz, Leon.	25 00
Morgan, Geo. P.....	250 00
Morgan, J. B.	100 00
Moore, Henry D.....	1,000 00
Moore, E. J.....	500 00
Mulford, Spencer K.....	125 00
Pew, J. N.....	1,000 00
Pierson, Walter.	1,000 00
Pugh, Chas. E.....	500 00
Read, John R.....	250 00
Riley, Lewis A.....	250 00
Rosengarten, F. H.....	250 00
Rosengarten, Miss Fanny.....	500 00
Rosengarten, Jos. G.....	500 00
Ross, Morgan & Co.....	500 00
Shannon, J. Jacob.	500 00
Schlichter Jute Cordage Co.....	1,000 00
Sheafer, Arthur W.....	500 00
Sheafer, Henry.....	500 00
Shelmerdine, Wm. H.....	500 00
State of Pennsylvania.....	69,000 00
Steel, Edw. T., & Co.....	250 00
Sternberger, Samuel & Co.....	100 00
Smith, W. Hinckle.....	500 00
Snellenberg Samuel.....	500 00
Sugar Apparatus Mfg. Co.....	250 00
Townsend, Chas. C.....	500 00
Townsend, John W.....	250 00
Ward, Henry G.....	500 00
Walton, Chas. S.	500 00
West, Harry F.....	100 00
Wickersham, Geo. W.....	500 00
Wood, Howard.....	3,000 00
Wood, George.....	500 00
Wood, Stuart.....	500 00
Wostenholme, Thomas, Sons & Co.....	100 00
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\$159,875 00	

NEW MEDICAL LABORATORY.

Cheston, Dr. Radcliffe.....	\$500 00
Francine, Dr. A. P.....	100 00
Isman, Felix.....	250 00
The Keasbey & Mattison Co.....	5,000 00
McManes, Mrs. Catharine.....	12,500 00
Oliver, Dr. Chas. A.....	100 00
Tatnall, Henry.....	100 00
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\$18,550 00	

Treasurer's Report.

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PRIZE FUNDS.

Bennett, Philo. S.:	
Bennett, Estate of Philo. S.	\$400 00
Delano:	
Delano, Eugene.	50 00
Frazier Debate:	
Frazier, W. W., Jr.	100 00
"J. S. H.":	
Hitchcock, Miss Fannie R. M.	275 00
Mulford:	
Mulford, Wm. H.	25 00

SCHOLARSHIPS.

German Traveling Scholarship Fund:	
Rosengarten, Jos. G.	\$300 00
Lavinia Barnett Fairchild:	
Fairchild, Mrs. S. E., Jr.	5,000 00
	<hr/>
	\$5,300 00

UNIVERSITY PUBLICATION FUND.

Clark, E. W., Jr.	\$100 00
College Alumni.	100 00
Colton, S. W., Jr.	100 00
Cuyler, Thomas DeWitt.	100 00
Dickson, Samuel.	100 00
Doolittle, C. L.	200 00
Duane, James May.	100 00
Johnson, Emory R.	36 75
Jones, Thomas F.	100 00
Joyce, William H.	100 00
Riebenack, M.	100 00
Rosengarten, Jos. G.	200 00
Turner, Wm. J.	100 00
Wood, Stuart.	100 00
	<hr/>
	\$1,536 75

UNIVERSITY VIEW FUND.

Biddle, I. Wilmer.	\$15 00
Brazier, Mrs. Jos. H.	5 00
Flagg, Stanley G., Jr.	10 00
Geyelin, Mrs. H. Laussat.	10 00
Harrison, C. C.	100 00
Harrison, Alfred C.	100 00
Frazier, W. W., Jr.	100 00
Madeira, Percy C.	5 00
Meigs, Mrs. Arthur V.	5 00
Posey, Dr. Wm. Campbell.	100 00
Perot, Effingham.	25 00
Rosengarten, Jos. G.	100 00
Steel, Warner J.	10 00
Spaulding, Philip.	5 00
Valentine, John R.	10 00
	<hr/>
	\$600 00

REAL ESTATE—3316 WALNUT ST.

McCollin, Edw. G.....	\$35 00
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VETERINARY DEPARTMENT—CURRENT EXPENSE.

Lippincott, J. Bertram.....	\$1,000 00	
Lippincott, Walter.....	500 00	
	<hr/>	\$1,500 00

WHARTON HALL IMPROVEMENT FUND.

McKean, Mrs. Thomas.....	\$500 00
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To the Trustees of the University of Pennsylvania.

Dear Sirs:—We hereby certify that we have audited the accounts of the University of Pennsylvania for the fiscal year ended 31st August, 1906, and found them to be correct and carefully kept. The foregoing report of the Treasurer is in accordance with the books, and the schedule of securities therein agrees with the securities which were on hand 31st August, 1906.

Respectfully yours,

LYBRAND, ROSS BROS. & MONTGOMERY,
Certified Public Accountants.

17th January, 1907.

REPORT OF THE ASSISTANT TREASURER OF THE DEPARTMENT OF ARCHÆOLOGY.

For the Year Ending August 31st, 1906.

RECEIPTS.

Balance, August 31, 1905.....	\$4,681 22
Annual Dues.....	3,600 00

General Fund:

Donations:

S. F. Houston.....	\$3,608 11	
John H. Converse.....	1,500 00	
E. B. Coxe, Jr.....	1,000 00	
Mrs. Lucy Wharton Drexel.....	1,000 00	
E. W. Clark & Co.....	1,000 00	
Thomas Dolan.....	500 00	
Calvin Wells.....	500 00	
John Wanamaker.....	500 00	
William H. Barnes.....	250 00	
J. E. Caldwell & Co.....	250 00	
J. Levering Jones.....	100 00	
Jacob S. Disston.....	100 00	
Alfred C. Harrison.....	100 00	
		<hr/>
		10,408 11

Income from Endowment Fund:

University of Pennsylvania Endowment Fund	\$2,878 47	
Interest, Mt. Washington Street Railway Co. Bonds.....	100 00	
Interest, New Mexico Railway and Coal Co. Bonds	250 00	
Interest, Seacoast Railway Co. of New Jersey Bonds.....	250 00	
		<hr/>
		3,478 47

American Exploration Society—Cretan Expedition:

Interest	86
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American Exploration Society—Boyd Publication:

Donations:

Mrs. S. F. Houston.....	\$1,000 00	
Calvin Wells	1,000 00	
Interest	60	
		<hr/>
		2,000 60

Egyptian and Mediterranean Fund:

Interest	6 47
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Building Fund:

Interest		\$15 51
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Babylonian Fund, Nippur:

Interest		6 38
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Babylonian Publication Fund:

Income from sale of books.....	\$131 13	
Interest	2 14	
	<hr/>	133 27

Sommerville Endowment Fund:

Income		903 75
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C. Hartman Kuhn Fund:

Interest		25
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Carl Edelheim Excavation Fund:

Income	\$50 00	
Interest	3 75	
	<hr/>	53 75

Lucy Wharton Drexel Medal Fund:

Income	\$150 00	
Interest	2 94	
	<hr/>	152 94

Dillwyn Parrish Collection Fund:

Interest		31 81
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General Ethnology Fund:

Donations		
Joseph S. Clark.....	\$10 00	
F. S. McIlhenny.....	10 00	
S. F. Houston.....	2,504 82	
	<hr/>	2,524 82

Prize Essay Fund:

Donations:		
Subscriber	\$10 00	
S. M. Vauclain.....	5 00	
Henry G. Ward.....	20 00	
Robert C. Ogden.....	25 00	
Henry C. Lea.....	10 00	
Edward B. Smith.....	25 00	
Samuel Dickson.....	10 00	
C. C. Harrison.....	25 00	
A. W. Kelsey.....	5 00	
Joshua L. Baily.....	10 00	
Stuart Wood.....	10 00	
Frank Leake.....	5 00	
John H. Converse.....	10 00	
Cash	1 00	
Dr. William Pepper.....	2 00	
Mrs. I. B. Thorn.....	5 00	

Treasurer's Report.

297

J. G. Rosengarten	\$10 00
Miss Eliza Otto.....	10 00
Theodore N. Ely.....	5 00
Dr. Francis Walsh.....	2 00
Rev. Daniel Kendig.....	2 00
Miss M. A. Burnham.....	25 00
George B. Bonnell.....	20 00
Miss Clara Comegys.....	5 00
John F. Lewis.....	5 00
Mrs. William Saulbury.....	5 00
George Petry.....	1 00
Dr. W. H. Tousley.....	1 00
J. Levering Jones.....	50 00
James T. Shinn.....	5 00
Mrs. J. E. Woodbridge.....	3 00
Mrs. J. L. Wayland.....	2 00
Craig D. Ritchie.....	5 00
Miss Sallie Sharp.....	5 00
Mrs. Lucy Wharton Drexel.....	25 00

\$364 00

General Fund:

Sale of Publications.....	\$70 24
Receptions	40 00
Refunds	58 55
Sale of Photos and Slides.....	25 70
Interest on Deposits.....	6 81

198 80

\$28,561 01

DISBURSEMENTS.

General Fund:

Printing Publication	\$778 73
Supplies	2,869 07
Insurance	676 00
Coal	944 89
Telephones	228 89
Repairs	495 92
Salaries	18,368 23
Publications purchased	81 87

\$18,884 00

American Exploration Society.....	1,900 00
Babylonian Fund, Nippur.....	49 00
Lucy Wharton Drexel Medal Fund.....	73 23
General Ethnology Fund.....	2,552 23
Prize Essay Fund.....	376 99
Babylonian Publication Fund.....	6 52
Balance, August 31, 1906:	

American Exploration Society, Cretan

Exp.	\$44 85
Egypt and Mediterranean Fund	330 14
Building Fund	791 47
Babylonian Fund, Nippur.....	310 24
Babylonian Publication Fund	179 43

C. Hartman Kuhn Fund	\$12 95		
Carl Edelheim Excavation Fund.....	228 09		
Endowment Fund	1,017 52		
Lucy W. Drexel Medal Fund.....	171 35		
Dillwyn Parrish Collection Fund.....	1,622 49		
			<hr/>
			\$4,808 63
Deficit:			
General Fund	\$70 35		
Prize Essay Fund	19 89		
			<hr/>
		90 24	
			<hr/>
			\$4,718 89
			<hr/>
			\$28,561 01
			<hr/>

Respectfully submitted,

JANE M. McHUGH,
Assistant Treasurer.

We hereby certify that we have audited the accounts of the Department of Archaeology of the University of Pennsylvania for the year ended 31st August, 1906, and found them to be correct, and the securities and cash on deposit were found to be in accordance with the books. The foregoing report of the Treasurer was found to agree with the books of account.

LYBRAND, ROSS BROS. & MONTGOMERY,
Certified Public Accountants.

Philadelphia, 3d January, 1907.











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